

Designing for Hope and Dignity

Female Specific Approach to Prison Design

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Master's Thesis

University of Oulu
Oulu School of Architecture

Author
Aino Telama

Advisor
Aulikki Herneoja



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Aino Telama

Abstract

This master's thesis, *Designing for Hope and Dignity: Female Specific Approach to prison design*, recognizes the need for gender specificity in prison design. Prisons are highly male dominated environments where women are often a marginalized and invisible group. Female inmates have distinct needs and do not benefit from prison's gender-neutral practices that are on a closer inspection based solely on male norms. Through gaining a fuller understanding of female prisoner needs and knowledge in architecture's effect on wellbeing, the thesis aims to create a concept design that enhances wellbeing and is better suited for the needs of female inmates.

The thesis is divided into two sections. The first section is the literary background study which aims to answer the following questions: who female prisoners are, what are their needs, why it is advantageous to invest in better prison design, and what are important design attributes we can apply to improve wellbeing. Currently in Finland female prisoners are placed in separate female wards in male prisons or in Finland's only female prison. It appears that most of these small wards in male prisons are inadequate at meeting female needs. Female prisoners would benefit from being placed in institutions that are separate from men and have been designed with women in mind.

The latter section is the conceptual design, where analyses formed from the background study are utilized to create a closed prison design for women which seeks to promote prisoner wellbeing. The design is established on the idea that well-thought-out architecture that feels safe for women, fosters positive interactions, and is humane in scale and size, has the potential to support inmates in regaining some measure of dignity and provide opportunities for hope. The overall design composes of a general plan of the prison's campus style layout and its spatial solutions, which are not tied to a particular site. Following a closer examination on spaces that have important roles in enhancing wellbeing, such as visitation and living spaces.

Tiivistelmä

Tämä diplomityö tunnistaa nais erityisyyden tarpeen vankiloiden suunnittelussa. Vankilat ovat miespainotteisia ympäristöjä, joissa naiset ovat usein näkymätön marginaalisessa asemassa oleva ryhmä. Naisvangeilla on omat tarpeensa, eivätkä he ole pääset hyötymään vankiloiden niin sanotuista sukupuolineutraaleista toimintamalleista, joiden voidaan lähemmän tarkastelun myötä todeta pohjautuvan miesnormeihin. Tällä hetkellä Suomessa naisvankeja sijoitetaan joko Suomen ainoaan naisvankilaan tai erillisiin pieniin naisosastoihin miesvankiloissa, joista suurin osa ei kykene vastaamaan naisten tarpeisiin. Naisvangit hyötyisivät siitä, että heidät sijoitetaan omiin laitoksiin, jotka on suunniteltu heitä ajatellen. Kiinnittämällä huomiota naisvankien tarpeisiin ja tietoon arkkitehtuurin vaikutuksesta hyvinvointiin, työn tavoite on luoda konseptitasoinensuunnitelma, joka tukee hyvinvointia ja naisvankien erityistarpeita.

Diplomityö on jaettu kahteen osaan. Ensimmäinen osa on kirjallinen taustatutkimus, jonka tarkoituksena on vastata seuraaviin kysymyksiin: keitä ovat naisvangit, mitkä ovat heidän tarpeensa, miksi panostaa parempaan vankilasuunnitteluun ja mitkä ovat tärkeitä suunnittelukeinoja, joita voimme soveltaa hyvinvoinnin parantamiseen.

Työn jälkimmäinen osio on konseptisuunnitelma, jossa taustatutkimuksesta saatua tietoa hyödyn-tämällä luodaan suljettu vankilamalli naisille, joka pyrkii edistämään vankien hyvinvointia. Suunnitelma perustuu ajatukseen siitä, että harkitulla arkkitehtuurilla, joka tuntuu turvalliselle, edistää positiivisia vuorovaikutuksia ja on kooltaan ja mittakaavaltaan inhimillinen voi jossain määrin auttaa vankeja palauttamaan ihmisarvoa ja tarjota toivoa. Suunnitelman alkuosassa esitetään kampusmallia soveltaen yleissuunnitelma vankila-alueesta, joka ei ole paikkasidonnainen. Tämän jälkeen työssä tarkastellaan lähemmin hyvinvoinnin kehittämisessä tärkeässä asemassa olevia tiloja, kuten vankilan vierailu- ja asuintilat.

Introduction

Prisons are predominantly associated with long corridors, iron bars, stone walls, and impenetrable structure that do very little to liven our senses. They are what Goffman described as exemplary representations of “total Institutions.” Places where people live-in twenty-four-hour settings with very little autonomy over their environment, having to rely on staff for the most basic of necessities (Goffman, 1961).

People generally think of male inmates when they think of prisons, which is understandable since men make up the majority of prison populations worldwide (Owen et al., 2017). In Finland, like most countries over ninety percent of the prison population are male (Rikosseuraamustaitos, 2019) (Owen et al., 2017). In these male dominant environments female prisoners are often an invisible marginalized group who tend to be left out from prison healthcare or completely forgotten from the organization of prison activities, safety, and staff education (Tammi-Moilanen, 2020). Prisons have been designed primarily for men with men in mind. And as a result, women’s prisons are usually built according to these preconceived notions with design decisions that end up following on typical solutions and forms of those of men’s prisons (Basalo, 2017).

As a group, women prisoners are particularly vulnerable with poor mental health, backgrounds

*“There’s a tendency to build
male facilities without urinals
and call them female facilities”
(Carp & Davis, 1989)*

in trauma, and high percentages of substance abuse (Norwegian Parliamentary Ombudsman, 2016). There is international recognition that female prisoners have their own set of needs. International agreements and recommendations, such as the United Nations Bangkok rules, European Prison Rules and Europeans Committee for the Prevention of Torture ask for attention to be paid on the special needs of women prisoners, prohibit discrimination on the basis of sex and recommend female and male prisoners to be kept apart (Tammi-Moilanen, 2020).

Penal ideology is shifting in a more progressive direction placing emphasis on rehabilitation and decreasing recidivism (Karthaus et al., 2019). Despite this contemporary prison design has made little fundamental change in the past 150 years “when spatial experiments have periodically been tried, the tragic consequences of their flaws have ensured that architects and commissioners have fallen back on the tried and tested designs of history” according to Jewkes et al. (2019). Some countries, such as the Nordic countries are

embracing a more rehabilitative approach that reflects their penal philosophy. These countries are recognized for creating more innovative designs that intend to create humane spaces and ‘normalized’ prison environments that support social rehabilitation. (Jewkes & Gooch, 2019)

This master’s thesis Designing for Hope and Dignity: Female Specific Approach to Prison Design realizes the need for a female specific approach in prison architecture. In gaining a better understanding on the subject matter, the thesis’s background section seeks out to answer the following questions: who are female prisoners and what are their needs, why should we invest in better prison design, and what design attributes we should implement in our design? These questions are particularly reflected through Finnish prison environments in mind. A historic review on prison architecture was knowingly left out of the thesis. Instead, the background section looks for examples from healthcare on how wellbeing can be enhanced and analyses contemporary works that are recognized for their modern design solutions.

The design section of the thesis aims to create a conceptual design of a humane prison setting that offers women a sense of safety and autonomy through spatial planning. The thesis utilizes knowledge from environmental psychology on how architecture can be applied to create places

that support wellbeing and offer aspiration in hopeless situations. The design is approached through the experience perspective of female prisoners. The conceptual design format is fitting for this thesis for the plan is not tied to any specific site. In addition to the general plan, women’s accommodation spaces and visitational areas are explored further and seen as significant places for enhancing wellbeing. Living spaces act as multifaceted environments where women spend the majority of their time. They are places of sleeping, privacy, eating, working, interacting, and learning. Visitation areas can cultivate hope and upholding relationships with friends and family are important for wellbeing. Especially, since many of the women are mothers and visiting areas provide women with opportunities to bond with their children.

This thesis does not separately examine mother and child units nor areas for remand prisoners. In Finland women are allowed to have children under the age of two with them in prison depending on the situation and on the length of incarceration. These women are placed in family units in Vanaja’s open prison. Remand prisoners, prisoners awaiting trial and accommodated separately from other prisoners, are able to have small children with them in closed closed prisons.(Lapsiperheen Arkea Perheosastolla, n.d.)

In the thesis gender is understood as a cultural construct (Owen et al., 2017) with the focus on female prisoners and those who identify as female. Yet gender is more complex and not everyone identifies themselves as being female. However, this thesis does not examine gender diversity, because currently there is hardly any available data on gender minorities, such as trans, genderfluid, non-binary people entering prisons in Finland or internationally. Gender minorities are even more marginal than female prisoners. In the conceptual design, conscious effort is made in using language that does not undermine women's dignity incarceration and instead terminology is used to support a 'normalization' in the prison environment. For example, women are not referred to as prisoners, and prison cells are referred to as rooms.

Female specific prison design is topical with the new Hämeenlinna female prison opened in November 2020. The new Hämeenlinna prison was designed to replace the existing female prison on the site that was closed due to poor air quality (Salonen, 2018). Before being forced to close the prison had received numerous criticisms on violating human rights by accommodating prisoners in cells without bathrooms, forcing inmates to rely on buckets. Female prisoners were the last in Finland having to use these so-called dry cells ("New Parliamentary Ombudsman," 2009).

The new Hämeenlinna prison is realized in accordance with a new prison concept. The goal for the prison is to help inmates reintegrate into society and improve their abilities to live crime free lives after release. With activities better suited for the specific needs of female inmates and a prison designed with women in mind the new prison is a significant move forward in improving the safety and status of female prisoners. (Criminal sanctions agency, 2020) Unfortunately, progress is slow and there is a lot of work that must be done. Finland still has a long way to go in implementing international recommendations and acknowledging female specificity. Hämeenlinna's new modern prison was planned with female prisoners and their needs at its core. However, at the time of the opening in November 2020, the staff had not received any proper training on how to meet the special needs of incarcerated women. Alongside the opening of the new prison there is current discussion whether Finland should have another female-only prison. This is noted in the report conducted by the criminal sanctions agency in 2020, which addresses that women would benefit from being accommodated in separate facilities and criticized accommodating female prisoners in small wards in male prisons. (Tammi-Moilanen, 2020)

Currently there is little evidence that would support reasons to believe that in the foreseeable future prisons will be abolished (Fridhov & Grøning, 2018). Still the problematic nature of prisons cannot be completely bypassed. The legitimacy of prison systems continues to be on debate due to high recidivism rates, prisons' questionable capability in enabling rehabilitation and preventing criminal conduct. As a building form, prison design pushes the architect's ethical role visibly into focus. The ethical dilemmas of prisons require architects to go beyond the professional business practices and to distinguish to whom, exceeding the direct client they feel their responsibilities towards, responsibilities that include society which carries the accumulated burden of the social and economic costs of incarceration and the inmates who occupy the buildings. (Moran et al., 2019) This thesis however does not touch upon the complex, but important questions of whether prisons do more harm than good, whether we should have prisons at all or look for alternative design solutions to incarceration. Instead, it tries to find solutions on how we could build better prisons with a focus on wellbeing.

A versatile amount of reference material was used to achieve a broad understanding on the subject. These references ranged from research articles to literary works, dissertations, government reports

and radio broadcasts. However, relatively little research has been done on the prison environment's effect on wellbeing and in the conducted research female prisoners were rarely mentioned. In this thesis the main references used to address female prisoner needs were the 2008 report by Naiset Näkyviksi task group and the recent report in 2020 by Kaisa Tammi-Moilanen, director of Vanaja's open prison. Both of these reports were published by the Criminal Sanctions Agency. Richard Werner's book published in 2012 *The Environmental Psychology of Prisons and Jails: Creating Humane Spaces in Secure Settings*, with its thirty years of gathered research on the impact of prison environments, aided in providing an understanding on architecture's effect on prisoners in incarcerated settings. While the *Rehabilitation by design* report by Global construction consultants Gleeds and et al. (2016) offers concrete ideas on what design considerations should be made to improve prisoner rehabilitation. A particularly important reference work for the thesis was the *A Guide to Wellbeing in Prison Design* by Matter Architecture and et al. (2017). The guide emphasizes the importance of prison architecture's focus on wellbeing and directed the thesis's focus more in this direction. Along these bodies of work, a large part of the references consists of research articles on wellbeing in healthcare facilities, prison architecture, and on female prisoners.

1.1 Female Specifity, Prisoners and their Accomodation

1.1.1 Defining Female Specificity

“Contemporary feminist research has contributed to our understanding of the female experience in a way that does not simply contrast it to that of men.”

(Bloom & Covington, 1998)

Society’s prevailing prison culture is built around male needs and male-like conduct. This is possibly due to the large male majorities in substance abuse cultures and criminal sanctions. (Salovaara, 2019b) Lönnberg (2021) the project leader of Criminal Sanctions support foundation ‘Naiset näkyviksi’ highlights why there is a need for a gender sensitive approach for female offenders. Stating that the expectations, roles, and perceptions of femininity and women in our society are far away from the reality of which women with criminal backgrounds have lived. In a criminal and often drug-filled culture, gender really matters, as women are more likely than men to have experienced sexual, economic, or physical violence, harassment, subjugation or other traumatic situations. (Lönnberg, 2021)

In this thesis gender specificity is referred to as female specificity from the direct translation of the Finnish term ‘naiserityisyys’ and the term is understood as how Salovaara (2019b) defines it in her article on substance abuse and female specificity. Female specific approach is born from the understanding that female needs and actions are partly different, but equal to those alongside men. In prison care female specificity is based on understanding, respect, and safety. (Salovaara, 2019b)

1.1.2 Finland's Female Prisoners

Female prisoners are a marginalized group in more than one way. In society they are marginalized as prisoners and in prisons they are marginalized as women.(Tammi-Moilanen, 2020) Relatively little focus has been paid on female prisoners in academic research. Instead, prison research and criminology studies have primarily been focused on studying men in prison and their committed crimes, while studies on women comprise mainly of student theses.(Rikosseuraamusvirasto, 2008) From gathered universal knowledge on female offenders it can be suggested that female prisoners in all countries share many similar characteristics. Majority of these women are among society's most disadvantaged people with multifaceted problems and are often caretakers of children.(Fair, 2009)

In her dissertation on violence committed by women Lattu (2016) summarizes Finnish female prisoners as a heterogenous group of different women, bound by shared experiences of substance abuse, exclusion from society, becoming victims to violence and complicated questions regarding motherhood. The labels placed on female prisoners and their own feelings of shame make it difficult for them to return to society after incarceration. However, there are also female prisoners with criminal identities. Women who have constructed their so-called roles as “hard

women”, who do not regard their incarceration as traumatic. (Lattu, 2016)

In Finland women make up around eight percent of the total prison population according to the Criminal Sanctions yearly report and in 2019 there was an average of 228 female prisoners per day (Rikosseuraamuslaitos, 2019b). Of these women 50% of females were first time offenders. Surprisingly, the figure for violent crimes for female offenders in Finland is exceptionally high compared to other countries and violent crimes is the main cause of women entering incarceration in Finland.(Tammi-Moilanen, 2020) Compared to their male counterparts, women are disproportionately at a disadvantage in terms of education, employment, livelihood and physical and mental health, evident from a study on the health and work ability of female inmates (Viitanen, 2013).In this study, led by Matti Joukamaa in 2010, the health status of female prisoners was comprehensively studied for the first time in Finland. The study showed that a majority of women in incarceration are mothers with under-aged kids. Regarding work ability, the situation of interviewed women was poor with half of the women not having any vocational training and 78% were unemployed while only 6% had some form of employment. Substance abuse disorders were the most common cause for impaired work

capability, which was the case for 70% of the women. The second most common cause was mental disorders (39 %). On the health of female prisoners, the study revealed that a majority of the women suffered from poor mental health and 85% of the women could be diagnosed with a mental disorder at the time of the study. From the findings the truly alarming results were the extensive experiences of trauma in the lives of the female inmates. Women had reported high percentages of childhood sexual and physical trauma and two thirds of women reported having experienced physical and mental abuse in their relationships.(Viitanen, 2013)

Female prisoners renew are less likely than men to become repeat offenders (Tammi-Moilanen, 2020). In her dissertation on women convicted of crimes, Salovaara (2019a) highlights three key elements that could support female prisoner's reintegration into society. The first part is support for substance abuse rehabilitation and mental health services. The second part consists of attention to the quality of prison care and the demand for a more holistic approach so that the need of individual and female specific support can be taken better into account. The third part is supporting motherhood during imprisonment. The opportunity to be a mother to her child has a significant impact on an individual's

self-esteem and confidence, as well as for reintegration and aspiration to abstain from drug use. The importance of children for mothers is particularly evident through motivation for change. (Salovaara, 2019a)

Homelessness is another concern that must be taken in account when trying to improve the wellbeing of female prisoners and keep them from reoffending. According to a report on female prisoners as clients by Naiset Näkyväksi (2020), every third person leaves prison without a residence. This number is significantly higher in the case of female prisoners of whom forty percent return from prison without a home. These female prisoners are in a vulnerable position and not having a home puts them at risk of reoffending and substance abuse.(Naiset näkyväksi, 2020)

1.1.3 Female Prisoner Accomodation in Finland

Over the years small female prisoner wards have been established in different male prisons for a variety of reasons, but seldom has the reason been to meet the needs of female prisoners. Prisons have been allowed to organize their services and activities for female prisoners freely without guiding preconditions. International recommendations regarding female prisons are not widely known nor applied in prisons in Finland.(Tammi-Moilanen, 2020) When it comes accommodating female prisoners, prisons can be divided into three types: 1. Female-only prisons; 2. mixed gender prison, these prisons have been designed to accommodate both men and women; and 3. male prisons with female wards. The most common practice is for a country to have one or more female prisons with additionally smaller sized female wards in male prisons. (Rikosseuraamusvirasto, 2008) This is the case in Finland and Norway. Norway has two female-only prisons and six mixed prisons while in Denmark female prisoners have been placed in the same wards as men and there are no female-only prisons. Though currently this is starting to change, female prisoners are finally being accommodated in separate wards from men and from 2021 Denmark's will have its first female-only prison. Sweden has been more progressive in the matter and has accommodated women in separate prisons from men since 1998 and currently has five female prisons.(Tammi-Moilanen, 2020)

In Finland, the country's female-only oriented prisons are Vanaja's open prison and the recently opened Hämenlinna closed female prison. The new Hämenlinna's prison will accommodate women nationwide who are serving longer sentences. In addition to Hämenlinna prison, there are female wards in male prisons in Oulu, Konnusuo, Pelso, Turku, Vaasa, and Vantaa.(Tammi-Moilanen, 2020) Though, international research has criticized the forming of small female wards in male prisons. These small sized groups have been seen to form problems in organizing activities, attitudes towards female prisoners, and in interactions between male and female prisoners. Male prisons have been designed for men including the prison's structures and activities. In these prisons, women are given less space and the given spaces are not easily transferred to suit women. Female prisoner needs are in many studies found to be different of those from men and opportunities offered to women in these small wards are limited.(Rikosseuraamusvirasto, 2008) In international research it is known that women tend to be placed under unnecessarily high security levels, especially in cases where there is a limited number of places for female prisoners (Norwegian Parliamentary Ombudsman, 2016). While small female wards in male prisons are heavily criticized, it should also be addressed that international recommendations advise that women should be accommodated close to their

homes to maintain a close family connection. This close proximity has been one of the main reasons behind placing women in male prisons, but it should be noted that not all women want to return to their last place of residence or necessarily have their children placed there.(Tammi-Moilanen, 2020)

Recently, Finland's Criminal Sanctions Agency published a review on female prisoners conducted by Kaisa Tammi-Moilanen (2020). The report assessed the current conditions of female prisoners, their offered activities, and their safety. The review concluded that female prison work is not systematically led, monitored, or organized in the Criminal Sanctions Agency. Highlighting that there is no person in charge of female work at a regional and institutional level, resulting in practices being implemented inconsistently and haphazardly. Another remark was made on the lack of knowledge and skill. The agency does not have organized training regarding female prison work and the meaning of female specificity seems to have varying interpretations. The report brought up the problems of ingrained prejudices towards women in the field, that at times were misogynistic. Other issues that the report brought up were that many women experience sexual harassment during their time in prison and addressed that staff need adequate training in identifying, intervening, and being

able bring up issues regarding sexual harassment. The gender distribution among staff also was a concern, noting that currently there is not enough female staff working in female wards. Health care services should be more accessible for female prisoners and adapted to meet their needs. More attention and education should be paid upon specific issues of domestic abuse, sexual abuse, prostitution, and human trafficking in health care services. Women should be offered opportunities to seek health services from female doctors and nurses and female prison work calls for strengthening its skills in mental health work. At a national level there has been little offered drug rehabilitation for women. The agency should pay close attention in not reinforcing old gender stereotypes in the offered work activities for women. Instead, women should be provided with equal opportunities to a variety of activities instead of typical offered activities such as sewing, handiwork, and cooking. Regarding the future of female prison facilities in Finland, Kaisa Tammi-Moilanen proposes that there is a need for another female-only closed prison addition to the new Hämenlinna female prison. Furthermore, alongside Vanaja's open prison there should be a new female-only open prison located near the center Finland and northern Finland region. (Tammi-Moilanen, 2020)

1.2 Importance of Prison Design and Wellbeing

1.2.1 Understanding why it is Important to Invest in Better Prison Design

In approaching prison design it is necessary to be aware of the surrounding goals and philosophies regarding imprisonment and to distinguish that “people are sent to prison as punishment not for punishment” as the Rehabilitation by Design report by Gleeds et al. (2016) states.

“Jails and prisons represent more than just warehouses of bed space for arrested or convicted men and women. They are more complicated environments than just good or bad, comfortable or not. The design of a jail or prison is critically related to the philosophy of the institution, or maybe even of the entire criminal justice system. It is the physical manifestation of a society’s goals and approaches for dealing with arrested and/or convicted men and women, and it is a stage for acting out plans and programs for their addressing their future.”

(Wener 2012, p. 7)

As the above quotation states Wener (2012) implies prison architecture reflects the penal philosophies of the existing society in which they are located in. In Finland, the imprisonment act states that incarceration should be a mere loss of liberty and the act underlines that the conditions of imprisonment are to be arranged so that they resemble the current society’s living conditions. The objective of imprisonment as stated, “is to increase the readiness of a prisoner to lead life

without crime by promoting the prisoner’s ability to manage his or her life and by promoting his or her integration into society, and to prevent the commission of offences during the term of sentence.” (Ministry of Justice, Finland, 2020) Looking at current statistics with every second male and every third female returning to prison in the next five years following their release, it can be argued that prisons are not effective in reducing recidivism (Rikosseuraamuslaitos, 2019b). This raises the question, could prison design with a wellbeing approach and acknowledgment of prisoner’s needs be more effective in the social reintegration of offenders?

Better prison design is beneficial for everyone’s safety. Kaisa Tammi-Moilanen expresses this simply in the podcast discussion with Kaartamo & Tapainen (2019). When we discuss prison work, we are talking about everyone’s safety and when people are released from prison they eventually do so as our neighbors. Treating inmates humanely and figuring out the root causes for an individual’s criminal behavior, facilitates in creating society safer for us all. The poor treatment of prisoners in poor conditions only leads to individuals being more detached and marginalized from society once they are released. (Kaartamo & Tapainen, 2019) Also, from an economic perspective there is a large interest in helping

prisoners to desist from crime. Pauli Nieminen, the director of West Finland’s criminal sanctions region, states that reducing the reoccurrence of crime has a significant economic impact on society. According to him reducing recidivism by ten percent would save society 180 million euros a year. (Lappalainen, 2018)

When we discuss prison conditions, it is important to remember that it is not only the inmates who occupy the facilities, but the prison staff as well. With prison sentences being relatively short in Finland (Rikosseuraamuslaitos, 2019), prison workers can often spend a longer time in prisons than the inmates convicted in them. Prison workers play a key role in rehabilitation. Which is why, good working conditions are essential for motivated and satisfied staff and in decreasing staff sick leave and turnover. (Gleeds et al., 2016)

Furthermore, all steps toward more humane prison conditions can lead to more progressive solutions in the future. Jewkes and Moran (2017) conclude that when prisons are designed to be brutal, unpleasant, and either sensorially overloading or depriving they reinforces the idea of inmates as deserving of such harsh environments. However, when prison’s architecture instead communicates positive qualities such as

trust, empathy, hope and respect, with design that challenges the stereotypical views of what a prison is and who a prisoner is, it becomes noticeably more difficult to maintain/justify the idea of inmates being ‘deserving’ of brutal settings. Taking this idea further, if prison’s design does not substantially differ from the accommodation of student buildings or well-designed hospitals, then maybe eventually prisons can be associated with the idea that justice can still occur without having to remove the ‘prisoner’ from the community. (Moran & Jewkes, 2017)

1.2.2 Key Attributes of Wellbeing in Incarcerated Environments

Prisons aim to reintegrate individuals back into society often with the expectation of individuals becoming healthy in unhealthy environments. Penal environments are confined, controlled communities and as such the way the institutes feel, look, and are designed and constructed has immense effect on both prisoners and staff. (Matter Architecture et al., 2017) It is now known that the basic human needs for privacy, agency, territory, socialization and self-worth are generally contraindicated in institutional design (Sachs & Shepley, 2019). Prisons are highly stressful spaces and only recently is the role that built environments have in generating that tension starting to be realized (Moran & Turner, 2019). Yet new prison architecture is predominantly led by efficiency and security, while keeping costs at minimum (Moran & Jewkes, 2017). In their guide for better prison planning Matter Architecture (2017) place wellbeing as the primary objective of prison design. In relation to this thesis, wellbeing as the central focus of prison design is a logical approach when factoring in female prisoners' poor physical and mental health, work abilities (Viitanen, 2013), high service needs, and often lower security requirements (Norwegian Parliamentary Ombudsman, 2016). The following text highlights the key elements that contribute to enhancing wellbeing in incarcerated environments, supported by knowledge from environmental psychology.

Normalization

Normalized prison environments have shown to have a positive effect on a prisoner's behavior in evidence-based research. The concept, pioneered in Nordic countries, ascribes to the idea that prisons should be established reflecting everyday life as much as possible. (Gleeds et al., 2016) Findings propose that it is crucial for a prison space to have a wellbeing function, supporting a positive and strong identity (Matter Architecture et al., 2017). The normalized model acknowledges this and sees prisoners not just as one-dimensional prisoners, but as social beings with multifaceted layers to their identities (Gleeds et al., 2016). Historically, prison architecture has attempted to deny persons of their sense of self. Cities utilized the architecture of their Victorian age prisons as a symbolic tool to intimidate citizens from committing crimes (Hancock & Jewkes, 2011). On the contrary, it is nowadays understood that prison architecture that communicates negative messages can possibly become self-fulfilling and can at worst reinforce criminal and criminalized identities. Thick mesh fences, bars on windows, high internal walls and cage-like interiors work as a constant reminder of incarceration and work against the objectives of the normalized model. Individuals are more likely to desist from crime if they do not take on a 'criminal' label. (Gleeds et al., 2016)

Agency

A normalized prison environment seeks to provide individuals with opportunities for responsibility and agency (Gleeds et al., 2016). In the Rehabilitation by Design Report (Gleeds et al., 2016), agency is best described as the feeling of control, knowing that one has a degree of influence over one's life and immediate environment. The institutional environments of facilities such as hospitals and prisons are characteristically 'low choice' or 'low control' spaces that are designed to limit a person's capacity to control their surroundings or movement in it. Feelings of helplessness, abnormality and ineffectiveness can be attributed to this lack of control and counters the rehabilitative aims of these environments. Environments that have built-in opportunities of choice can potentially uplift a person's emotional state and enable a sense of self-efficacy and wellbeing. (Matter Architecture et al., 2017) In these institutional settings, agency can be provided, for instance, through cooking, taking care of physical needs, social interactions, choosing to partake in religious activities, being able to control the lighting and heating in the room as well as to being able to personalize private rooms. These events can help foster more normalized daily routines and increase prisoners' quality of life. (Kaa-Deeder et al., 2017) accountability for their behaviors, surroundings, and themselves (Gleeds et al., 2016).

Size and Layout

"The internal arrangement of a building can influence the degree and quality of personal relationships within to a remarkable degree. These relationships will not develop healthily in huge impersonal blocks of cells where the individual is dwarfed by the overpowering size of the structure. They can only be attempted in buildings which respect the quality of the individual by being attractive, as normal in appearance as possible, and suitable in scale." (Fairweather, 1961)

As Fairweather (1961) stated above, the size and layout of institutes has impact on those inside it and are critical to the design as they influence aspects such as refuge, personal space, awe, and comfort (Matter Architecture et al., 2017). Smaller prisons compared to larger facilities have shown in research to be noticeably better at safely accommodating inmates, providing meaningful work, encouraging activities, training and education, and supporting healthy relationships. Having fewer prisoners allows for prisons to be designed at a smaller scale. One of the noticeable benefits of keeping group sizes small is the quality and frequency of staff and prisoner interactions. (Gleeds et al., 2016) While large inmate populations and prison overcrowding are shown to contribute to numerous negative effects on wellbeing, such as stress, aggression, anti-social

behavior, and deprivation of personal space(Matter Architecture et al., 2017).

A prison study in Norway by Johnsen et al.(2011), focused on prison workers, found that officers have better relationships with prisoners in small prisons compared to medium or large prisons. Moreover, officers in smaller prisons account to having better relationships with senior management and the authors believe that smaller prisons are more capable of offering humane prison conditions compared to their larger counterparts.(Johnsen et al., 2011) Prisons can be generalized into three different typologies: integrated prison, cluster system and campus system. The integrated prison typically has all its facilities situated in a single building, whereas a cluster system forms from moderate degree of various buildings situated in close proximity. A campus system composes of multiple buildings usually over a larger site and has the least degree of integrated services. (United Nations Office for Project Services (UNOPS), 2016) Research indicates that prisoners in facilities with a campus layout reported to have more positive relationships with prison staff (Matter Architecture et al., 2017).

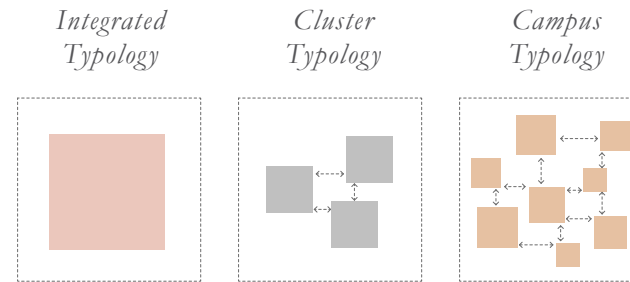


Figure 1: Diagram of prison typologies

The layout of a prison and how easy it is to navigate through is direct correlation to the perception of safety. Environments that are legible and allow for orientation are found to be less stressful. In healthcare, rehabilitative benefits are noted in environments that are designed to offer privacy while simultaneously supporting social interactions with common areas that are easily accessible and part of natural circulation.(Matter Architecture et al., 2017) Another important aspect to factor into design is clear sightlines. Sightlines along with increased staff interactions are important safety precautions in preventing bullying, intimation, and contraband. Sightlines also provide a feeling of openness which is important for wellbeing.(Gleeds et al., 2016)

Privacy

Deprivation of privacy is one of the known pains of imprisonment (Moran et al., 2013). Matter Architecture (2017) defines privacy as the ability for an individual to regulate access to themselves and not just a reflection of the condition of being alone. Other elements that pertain to privacy are personal space, territory, and personalization. Especially in confined settings these elements are essential for establishing comfortable environments for both inmates and staff.(Matter Architecture et al., 2017) Privacy in prisons should be extended to sleeping, personal belongings, personal hygiene and maintenance, and private rooms should be designed to allow for personalization and adaptation. This entails that inmates should be provided opportunities to choose their own furnishings such as curtains, bed linens and pictures, re-arrange furniture in living areas, adjust light fixtures.(Gleeds et al., 2016) Personalization encourages a sense of control over one's surroundings, increases personal dignity and allows for individuals to feel more invested in their environment (López, 2014). While territory is often associated with problematic and aggressive behavior, the ability to clearly maintain and define an individual's territory seems to maintain more harmonious social interactions to a certain degree. Territory is different from personal space in that it refers to

the way individuals behave towards a particular area of space.(Werner, 2012)

Meaningful interactions

For prisoners to effectively desist from crime they need hope. Hope can be cultivated from various sources and this differs for each individual, though it is acknowledged that the core commonalities are family, friends, prison staff, third sector support, and employment.(Gleeds et al., 2016) For prisons to support prisoner wellbeing, they must find solutions in allowing the 'outside in' with balancing security requirements (Gleeds et al., 2016). Research shows that having and maintaining strong interpersonal relationships with family or friends reduce the likelihood of reoffending, yet prison visitors regularly express feelings of guilt by association, secondary stigmatization and prisonization, which can lead to discouragement of visitation (De Claire & Dixon, 2017). Moran (2011) describes this experience in her paper on prison visitation as visitation spaces are a deviation from both the inmate's and visitor's everyday lives. It is a space where these two groups from the inside and outside meet and together enter a new space which is designed with notions of a domestic setting while still being firmly located within the prison. For visitors this means stepping in prison not necessarily as a

prisoner, but as a pseudo-institutionalized human who is under the penal surveillance of prison management, and dependent on following the rules and regulations of the prison system. (Moran, 2011) While contraband entering prisons is a significant security concern all opportunities aimed to make security as least invasive as possible and to prevent secondary stigmatization should be welcomed so that visitation is not discouraged (Gleeds et al., 2016).

Prisons need to be designed and located so that visitation is accessible to all. This includes sufficient parking and good public transportation connections (Gleeds et al., 2016). Within the prison, welcoming visitation and reception are important, while respecting security demands. This can be achieved through abundant natural light, textures and colors, comfortable furniture, and adequate room to move through security precautions.(Matter Architecture et al., 2017) A large percentage of women are mothers (Rikosseuraamusvirasto, 2008) and parenting should not be cut off by imprisonment. Children have the right to meet and otherwise interact with their parent if it is in the best interest of the child (Vanhemmuuden Hoitaminen Vankilassa, n.d.). However, prisons, including visitation areas are often sterile and loud environments that have not been designed with a child's perspective in mind. Security procedures, plexiglas, non-contact visits can be frightening

and stressful for children and mothers can often sense their children's distress affecting the positive outcomes of visits.(Schubert et al., 2016) To nurture positive interactions, visitation areas need to be child friendly with children considered in the design.

Physical Human Needs

In incarcerated environments human physical needs play a significant role on a person's wellbeing. Therefore, design solutions must factor in qualities such as light, sleep, noise, temperature, and ventilation. Variation in temperature and air flow have positive effects on wellbeing, such as enhanced concentration, efficiency and comfort. (Matter Architecture et al., 2017) In healthcare settings the quantity and quality of artificial lighting and exposure to daylight is correlated with numerous staff and patient outcomes. (Ulrich et al., 2008) For both patient and staff wellbeing, access to daylight is imperative. For staff it leads to higher job satisfaction, while for patients, access to daylight has been shown to reduce occurrences of depression and pain. (Ulrich et al., 2008) Additionally, recent studies in hospitals have shown that varying light spectrums throughout the course of the day have substantial benefits for wellbeing. These include both artificial and natural sources of diffused and dynamic lighting, which are associated with

heightened visual comfort and with beneficial effects for the circadian system.(Matter Architecture et al., 2017) Improving the quality, direction, intensity, control and variability of light sources can increase wellbeing, in design. This can be achieved for instance by providing proper task light for workstations and curtains in living areas. (Matter Architecture et al., 2017)

Prison settings though often lack appropriate lighting conditions for inmates. Natural daylight is regularly scarce, artificial lighting is frequently either too dim or unreasonably harsh and during the night spaces lack adequate darkness for sleeping. Insomnia is a major problem in prisons and insufficient sleep can increase aggression, irritability and depression.(Wener, 2012) Noise is another factor that has a direct influence on the quality of sleep, and can cause sleep deprivation (Wener, 2012,p.194). In his book Wener (2012) reviews the effect of noise in prison environments. Prisons are often loud settings due to hard surfaces, lack of textiles, constant mechanical noises and overcrowding. The absence of control and predictability over noise generates stress and can reduce motivation and heightened aggression among people previously provoked. Negative impacts of exposure to noise can be lessened if individuals have some degree of ability to regulate their noise exposure.(Matter Architecture et al., 2017)

Aesthetics

The typical bland and sterile norms of prison environments provoke feelings of anxiety and stress by mimicking the experience of sensory deprivation and neurophysiological breakdown. In their lack of color and legibility these minimalist spaces reproduce similar sensations to those of clinical symptoms of strokes, macular degeneration, and visual agnosia.(Salingaros & Masden, 2008) There is strong evidence that general dearth of color in institutional facilities has negative effects on wellbeing. Though there is not a lot of sufficient and extensive evidence of the relationship between wellbeing, mood and specific environmental colors. Even though in the past color has been presumed to have a significant impact on mood.(Wener, 2012) However, decisions regarding color impact overall design, such as affecting the brightness of a space or how homely a place is perceived. In prisons color can be utilized to counteract the boredom and monotony of institutional settings. Colors can additionally be used to emulate natural elements that can result in positive psychological outcomes.(Wener, 2012) Prisons research regarding furnishings has shown that hard furnishings and environments designed to resist vandalism may in fact 'challenge' individuals to damage them, ensuing an environment that is ineffective, dehumanizing, and expensive (Matter Architecture et

al., 2017). Design that instead is ‘softer’ and non-institutional can conjure better caretaking and lower aggressive behavior towards the immediate environment (Wener, 2012). In healthcare settings the aesthetic quality of the surroundings is shown to be correlated with better quality of care and motivated staff. In her study, Freja Ståhlberg-Aalto explains that aesthetic elements such as attention to design details, material quality of buildings and uniqueness of an environment translate to the user that they are deemed valuable and special. Furthermore, Ståhlberg-Aalto (2019) expresses that the connection between the structure and its external environment and how it is realized, is a reflection of respect and consideration towards the user. Views towards the surrounding environment allow users to stay connected to the outside world, enliven interior settings and create a sense of time passing that enhances the awareness of context and time. (Ståhlberg-Aalto, 2019)

Biophilia

The term biophilia relates to human’s innate affinity towards the natural world. The vast body of research on biophilia establishes that psychological and physical wellbeing is supported by exposure to the natural environment. (Matter Architecture et al., 2017) Close proximity to nature can provide individuals with enjoyment, relaxation, lowered stress and mental fatigue, and opportunities for reflection and restoration. The restorative experiences of nature can be divided into four qualities 1) being away, 2) extent, 3) fascination and 4) compatibility. Being away refers to being removed from present challenges and worries and to be distracted from everyday surroundings that are exhausting energy and attention. Extent pertains to surroundings that have a coherence and scope that allow for feelings of immersion and engagement. Fascination is holding one’s attention to the surroundings without having to direct or focus it a specific way or effort expended. Compatibility refers to doing an activity in the surroundings that is congruent and enjoyable and which fit to one’s inclinations and purpose. (Kaplan & Kaplan, 1989)

Some of the physical benefits of nature are lowered blood pressure and muscle tension (Ulrich et al., 1991). Studies have shown that in hospital environments gardens result in greater staff and

patient satisfaction, aid rehabilitation, increase physical activity and foster socialization (Ulrich, 2002). Biophilic design advocates for natural elements and processes being used in the built environment (Gillis & Gaterslebed, 2015). Wellbeing at the simplest level can be enhanced through natural images, presence of indoor plants, green reception spaces, and vegetative landscaping. Natural views out the window provides opportunities for our minds to wonder (Kaplan & Kaplan, 1989) and for individuals they can be especially useful and restorative after experiencing emotionally difficult events (Wener, 2012). Gardens can provide individuals with joy and pride to both observer and participant. They are a place that an individual can directly control and shape in a world and environment that are primarily outside their immediate control. The presence of greenery is undeniably pleasant but is often considered to be less essential to what is considered infrastructure. (Kaplan & Kaplan, 1989) This is part of the challenges of landscape design in incarceration. Prison construction and design are led by the imperatives of high security and low costs. Whereas planting flowerbeds and trees in prison yards is considered both a security risk and unnecessary (Should Prisons Have Trees?, 2018). Yet without vast greenery outdoor areas do not attract insects, birds and other wildlife and the landscape can become artificial, barren places that have no notion of a healing environment (Kaplan & Kaplan, 1989).

Trauma-informed Design

Individuals rarely enter imprisonment without a vast background in abuse and adversity. As such prisoners are inclined to be some of society’s more vulnerable and complex groups of people. (Vaswani & Paul, 2019) This is especially true of female offenders (Tammi-Moilanen, 2020). Trauma-informed care is a fairly new advancement (Miller & Najavits, 2012). It is based on the comprehension of the effect of victimizations and interpersonal violence on a person’s development and life and reducing retraumatization (Elliott et al., 2005). Whereas trauma-informed design is the incorporation of qualities from trauma-informed care into design with the aim of creating physical environments that improve wellbeing, safety and healing (Gill, 2019).

The core values of trauma-informed design comprise of eradicating and decreasing negative stimuli, providing individuals with a multisensory setting, supporting agency while balancing safety, promoting connectiveness to nature, and reinforcing a sense of identity. (Gill, 2019) The experience of incarceration can be intensely traumatic (Vaswani & Paul, 2019) and understandably prisons make challenging settings for trauma informed care and design (Elliott et al., 2005). In their article Creating Trauma-informed Correctional Care Niki Miller and Lisa Najavits (2012)

address some of the challenges of incarcerated environments, expressing that prisons are made up of inevitable triggers, such as restricted movement, loud noises, strip searches and pat downs, overcrowding, and punitive actions from authority figures. This can expectedly lead to the increase of trauma-related indicators and behaviors that prison staff can have difficulty in handling. The article additionally highlights the importance of staff as part of trauma-informed care and all staff - from reception to administration - must recognize the impact of violence on the persons' lives in incarceration. Staff play a key role in reducing triggers, decreasing serious episodes, alleviating prisoners, and avoid measures that could reproduce elements of previous abuse. (Miller & Najavits, 2012) Jewkes et al. (2019) argue that some trauma triggers are environmental and design practices along with healthcare delivery and operational culture should seek solutions for this. In their article, on how trauma informed design for women can be incorporated in prison environments, Jewkes et al. (2019) summarize that incarcerated settings need to be designed to ease feelings of uselessness and inability to manage imprisonment, as well as enhance positive views of self. To achieve this, prisons need to be 'welcoming environments' that include omission of exposure to explicit material, adequate personal space for privacy and well-being, and enough staffing to supervise invasive or harassing conduct. (Jewkes et al., 2019)

1.3 Three case studies

The case studies in the thesis compose of three relatively different projects: a closed prison in Denmark, a low security prison for women in Australia, and cancer centers designed for wellbeing in the United Kingdom. The cancer centers provide new and innovative ideas, outside the prison context, on how design solutions can be applied in creating a more nurturing environment. Prison environments have a great deal to learn from healthcare facilities. The two closed prison projects offer insight into modern campus style prison architecture and form a juxtaposition of a high and low security environment.



Figure 2: Storstrøm Prison, C.F. Møller Architects

Storstrøm Prison

Storstrøm is a high security prison located in Gundslev in the Danish countryside, designed by CF Møller with landscape design by Marianne Levinsen (C.F. Møller Architects, n.d.). The project has attracted a lot of media attention after completion in 2017. Storstrøm strives to promote social rehabilitation in prisoners through architecture in a modern and humane way while still being a high-security prison (C.F. Møller Architects, n.d.). The prison layout is intended to replicate a small village community in structure and scale that feel less institutional. This is achieved through a mixture of different building types, varied materials, textures, colors, and spatial scales. In total the site has ten separate buildings and covers 32 000m² of floorspace. At the center of the plan are the workshop and activity buildings forming a village square while the accommodation wings are scattered around with views away from the center towards the surrounding landscape. (Merrick, 2018)

The prison accommodates 250 inmates in its four two-story standard wings and one separate higher security unit. In the standard wings groups of seven cells share a communal kitchen/living room (“Danish Maximum-Security Prison”, 2018). The cells around 13m² in size are equipped with private bathrooms, a floor to



Figure 3: Storstrøm Prison, C.F. Møller Architects

ceiling window to bring natural light inside, and a smaller window that is sand blown to bring side light into the room and to make the space feel larger (Building centre, 2018).

“We wanted to create an architecture of phenomena, with details that would cause surprise, an architecture that wouldn’t be foreign to the eye, which prisoners could identify with because the sensations are recognizable. The prisoners can move around almost like those not incarcerated, with a controlled degree of informality. It was about creating a normality that was basically connected to the world outside the prison.”
- CF Møller partner Mads Mandrup Hansen.
(Merrick, 2018)

The landscape is created to be aesthetically pleasing and visually varied with a human scale between the buildings. Physical exercise is incorporated into the design. Between the scattered buildings there is a football field and pathways for jogging. The site is surrounded by a seven-meter perimeter wall. To minimize the impression of a monotonous concrete line, the perimeter wall is composed of different length sections in varying angles. These together create changing effects of shadow and light that alter throughout the day. To additionally enhance visual variety, the walkways are stripped with red, black and white. The site is mostly grassed. Swale is used in the areas where the ground is

exceptionally wet. Around 500 trees have been carefully planted so that they do not disrupt sightlines or video surveillance.(Merrick, 2018) Due to security and financial reasons some design compromises had to be made to the final landscaped design. These included the removal a small lake and clusters of trees. from the plan. (“Danish Maximum-Security Prison”, 2018)

The plan of Storstrøm and how the buildings are situated in relation to each other worked as inspiration for the thesis’s conceptual design’s layout. While the prison has higher security measures, the village concept of the prison provides individuals with increased movement around the facility and time spent outside. Due to the high security measures and prison restrictions, wet ground, and most likely pressure for easy maintenance the outdoor spaces appear to be quite barren and institutional in the project photographs. The lack of lush vegetation does not offer much variety for the outdoor space, which mainly consist of flat grass areas. Other features that were used as inspiration was the directing of views from cells to the surrounding nature and the maximization of light coming into the cells. It was refreshing to see such tall windows in prison cells.

Boronia Women’s Pre-release Center

In their article Finally fit for purpose: the evolution of Australian prison architecture, Grant and Jewkes (2015) argue that Australian penitentiaries have in the past uncritically imitated American correctional facilities in their structure and architecture. They note that transporting prison models from one geographic setting to another without fully understanding the philosophies and cultural contexts that underline them is problematic. This can at worst result in poorly designed prison environments that are unmanageable. Yet in recent years, Australia has made significant developments with new innovative prison design. The new facilities are created to be program oriented, address special needs, and apply US principles in a more culturally sensitive and contextually appropriate way. Australia has particularly made progress in its women’s facilities, which is best exemplified by the Boronia women’s pre-release center. (Grant & Jewkes, 2015)

Located in suburbs of Perth, Western Australia Boronia Women’s pre-release center is a low security prison that offers women the ability to be accommodated in a community-style environment while serving their sentence (Myers et al., 2017). The project began in 2001 after it became apparent that changes had to be made in managing female offenders. Completed in 2004 the



Figure 4: Boronia Pre-release Center, Paterson Architects

facility was built with the following goals: to decrease recidivism rate along with reintegrating women successfully into society, a working philosophy that incorporates and acknowledges the needs of female inmates, integrating community into the prison and the prison as part of the community, normalizing of living environments and organizational approaches.(Salomone, 2004)

The center is designed by Paterson Architects with the intent of creating an environment that is non-institutional and non-threatening. The layout for the facility is based on a village concept with houses scattered in a park-like setting, with civic streetscapes that offer opportunities

of interactions between neighbors and allowing a sense of security for its residents.(Boronia Pre-Release Centre for Women, n.d.) By its architecture it is hardly distinguishable as a prison from the outside. The prison’s residential buildings’ architecture looks like the typical suburban houses in the surrounding community with front yards and mailboxes.(Cleary, 2018) The center composes of twelve houses that accommodate 70 women in addition to two mother and child houses and few other units (Grant & Jewkes, 2015). The standard houses have a domestic style layout which comprise of five private bedrooms, a shared kitchen, bathroom, and laundry area. In these cottage style households, women are required to manage their own budget, prepare and plan their meals, do household chores and so on. It is suggested that this promotes women’s sense of personal responsibility, development of social skills, and provides women with tools to function self-sufficiently after incarceration(Bartels & Gaffney, 2011). Other buildings and spaces of the facility are the visitor areas, play areas for children, immediate care units, spiritual areas, administration areas, vocational training spaces, and a medical center all located in a well-maintained garden landscape (Grant & Jewkes, 2015).

What sets Boronia apart from many other prisons is its close proximity with the surrounding community. The site is located next to residential housing, university campuses, and retirement homes. The center works towards maintaining a positive place in the community. The resident’s women have been able to closely participate in community activities. The center is not surrounded by high concrete walls, instead the area is enclosed by a tennis court style mesh fence that is designed to blend into the suburban environment while still functioning as a physical barrier absent of barbed wires.(Office of the Inspector of Custodial Services, 2012)



Figure 5: Boronia Pre-release Center, Paterson Architects

Maggie’s Cancer Center

Maggie’s cancer centers are exceptional structures that are carefully designed to construct a welcoming environment for all users. They are landmark buildings, all distinct from one another, designed by some of the most prominent names in architecture such as Frank Gehry, Norman Foster, Zaha Hadid and Rem Koolhaas (Raskin, 2019). Currently there are 27 Maggie’s centers, of which 24 are in the UK and three are international centers (Maggie’s, n.d.). In the UK, the centers are typically situated next to major cancer hospitals and offer cancer patients an aesthetic counterpart to the often-outdated hospital structures. Maggie’s centers are unique in that they do not provide clinical treatment nor are there any patient beds, instead they focus on providing complementary cancer rehabilitation services such as cancer related information, exercise groups, and various emotional and social support programs for individuals in their different stages of cancer treatment as well as for their friends and families. The core principle for Maggie’s is the belief that the physical environment with its architecture and aesthetics can impact the wellbeing and healing of cancer patients.(Ståhlberg-Aalto, 2019)

“Maggie’s Centers a hybrid building type that is not quite a museum, church, hospital or home but has aspects of each, mixed together in an informal and easy-to-approach manner.”
- founding partner Charles Jencks
(Ståhlberg-Aalto, 2019)

All the centers are unique and specially designed to suit their surroundings. The architecture is both embracing and surprising and strives to create a calm, friendly environment full of light (Maggie’s, n.d.). The vulnerability of their users is acknowledged and a lot of thought has to be put into the entrance way. The arrivals into the facilities are carefully crafted so that they do not require a lot of effort and many of Maggie’s architects have opted for a meandering path leading to the center through a designed landscape. Seating is often found along the way, allowing visitors to proceed at their own pace.(Van der Linden et al., 2016) Curiosity is utilized and the building’s intriguing architectural forms can encourage visitors to step inside wanting to find out more about the building (Martin et al., 2019).

Inside the buildings there are no reception desks or signs that would give off an institutional feel (Van der Linden et al., 2016). The layouts of the buildings are typically open plan and easily navigable. At the heart of the building is the kitchen area with a table where visitors can easily help themselves to a cup of tea. Around the kitchen hub are library areas. Other spaces in the buildings are typically offices, a larger activity room, small counselling rooms, two sitting rooms and bathrooms that are private enough to cry in. (Van der Linden et al., 2016) Maggie centers are designed so that visitors can easily have interactions among staff and other users. However, the centers do not require their visitors to socialize to use the building. Design considerations are made to provide individuals with the opportunity to experience the building alone. This is done by offering users solitary calming spaces and variety of things to look at if they want to avoid eye contact, such as views towards garden areas, artwork on the walls, and architectural details and forms. (Martin et al., 2019) Maggie centers are buildings that make the visitor feel valuable by thoughtfully investing in artwork and in the artistry of the building and landscape (Ståhlberg-Aalto, 2019).

Maggie centers offer possible ideas on how architecture can be applied to enhance wellbeing and promote hope and dignity in its users. They

strive to be spaces that make users feel valued, safe, and less anxious (TedX Talks, 2018). Prison design could take these cues from Maggie's centers in effort to construct environments that are more considerate of their user's emotional needs.



Figure 6: Maggie's Leeds Center, Heatherwick Studio

2.1 Objectives for Conceptual Design

The objectives for the conceptual design is to create a prison for women that is focused on female prisoner wellbeing. This is fulfilled with the belief that good design can positively affect behavior, self-image, provide a sense of dignity and possibly even uplift a person in a helpless situation. For the prison’s typology I chose the campus model. I found it to be sufficient in meeting my design objectives and fitting for an environment for women. Compared to other typologies the model often encompasses a larger site. However, since the design is not tied to any particular site, the size of the plan is not a limiting factor.

Instead of mimicking solutions we commonly associate with prisons, I wanted the general plan to resemble a learning environment that draws similarities from university campuses. This entails an environment that aspires to be humane in scale, feel safe, foster positive social interactions, and be accessible to all. With the concept I wanted to highlight design ideas that can be applied to prisons models built today and simultaneously be flexible enough to meet the criteria of future prisons. From these future prisons I hope to see greater accessibility and for the design of closed prisons, especially for women, to be a closer resemblance of open prisons.

The flexibility that campus model allows for different residential buildings to have varying levels of security measures. This in turn enables for positive behavior and trust earned to be rewarded in increased agency and freedom of movement throughout the facility. The intention is for women to gain autonomy and movement as much as possible, so that staff resources can be focused elsewhere instead of escorting women between buildings. The increased movement through the site can have various physical and mental health benefits as well as the increased time spent outside and essentially offer women small pauses in between their daily routines and counteract the static life of imprisonment. The architecture of the buildings is intended to have both calming and uplifting elements while providing individuals with a variety of spaces and functions. In the conceptual design I take a closer examination of the residential buildings and visitation areas and their outdoor spaces. I believe these spaces provide significant opportunities for hope and wellbeing. In the residential building well-being is examined through layout, aesthetics, and agency while the residential rooms further examination privacy and personalization.

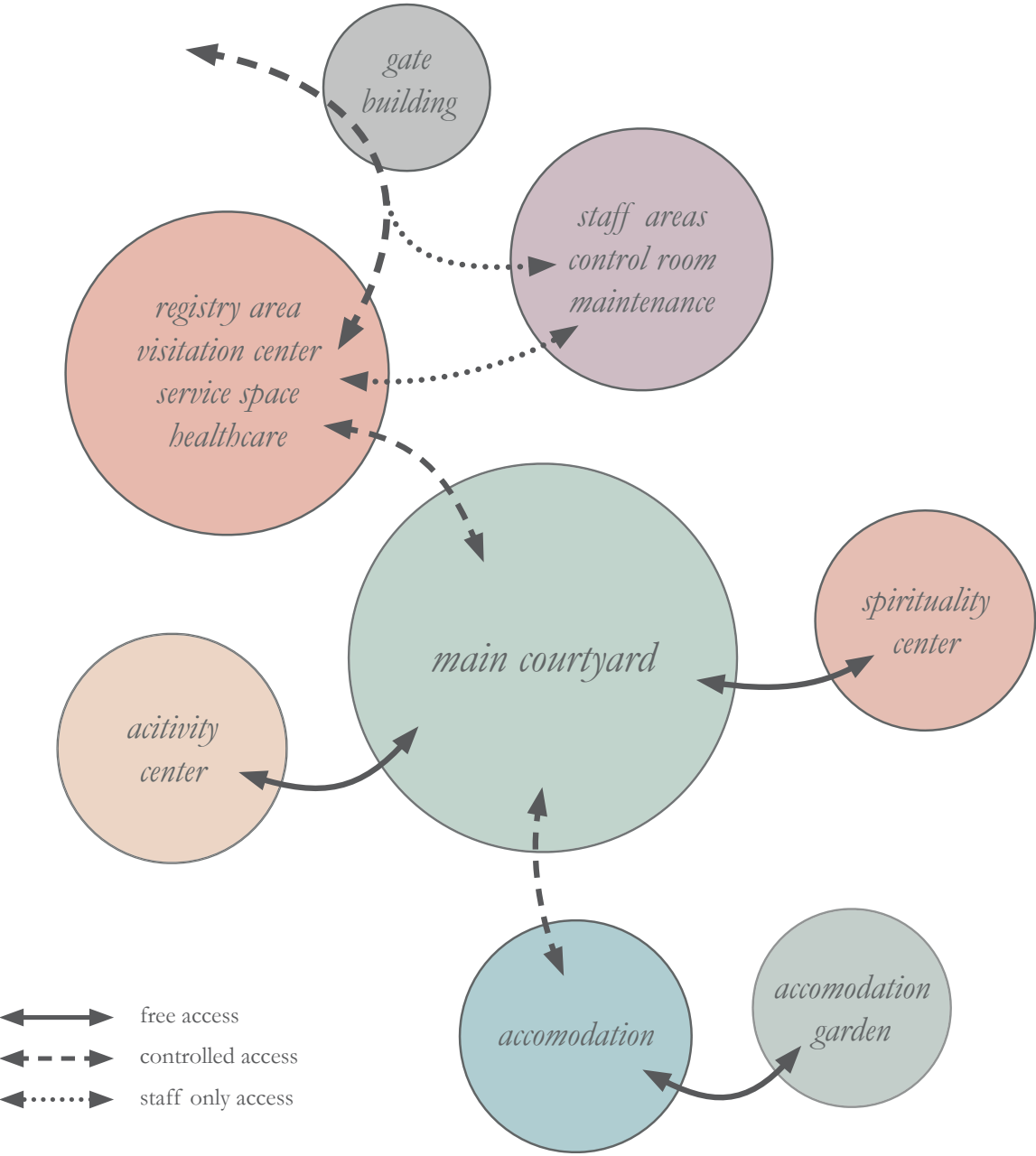
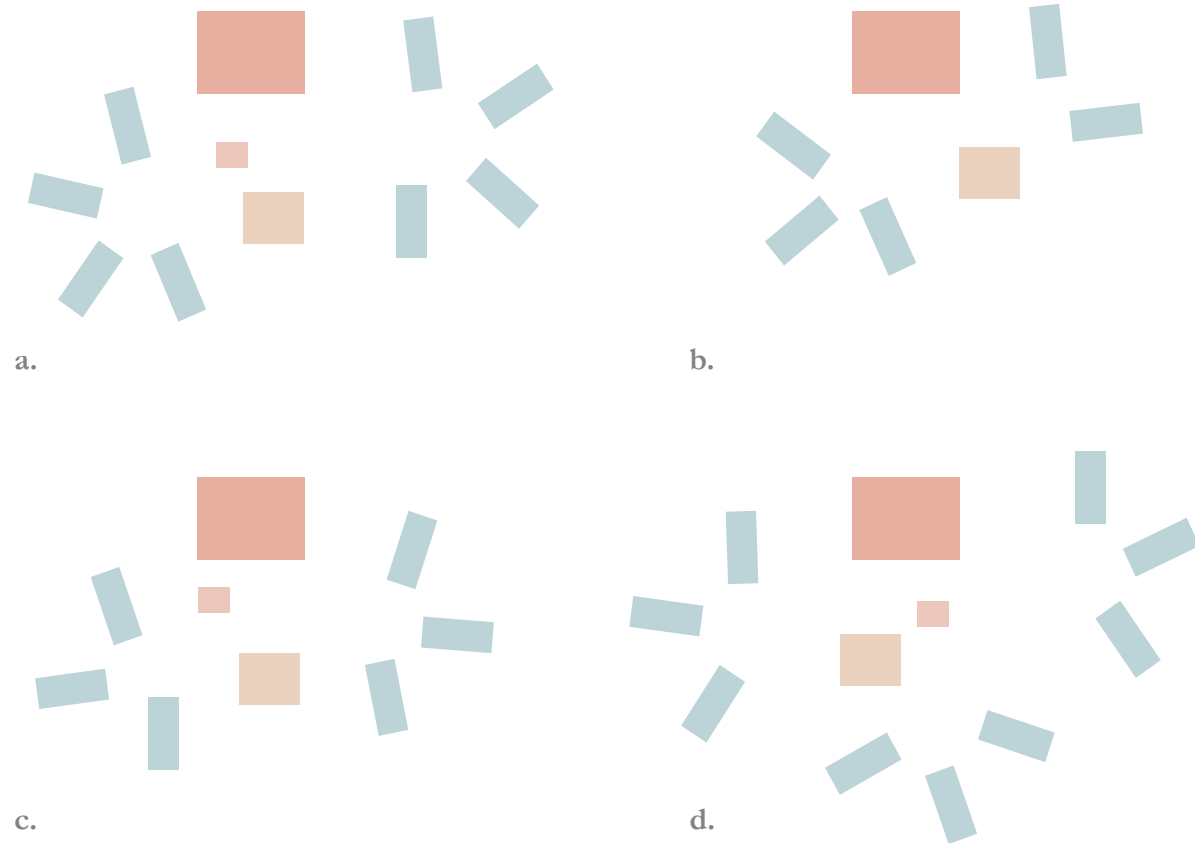
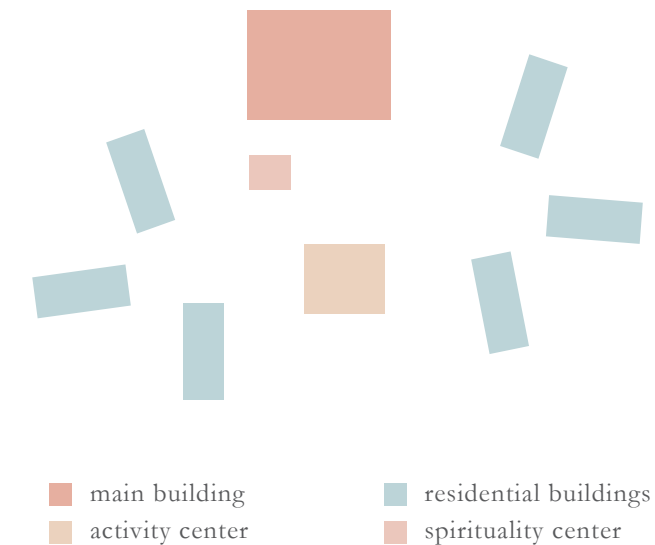


Diagram showcasing the prison’s different facilities and level of allowed access between them

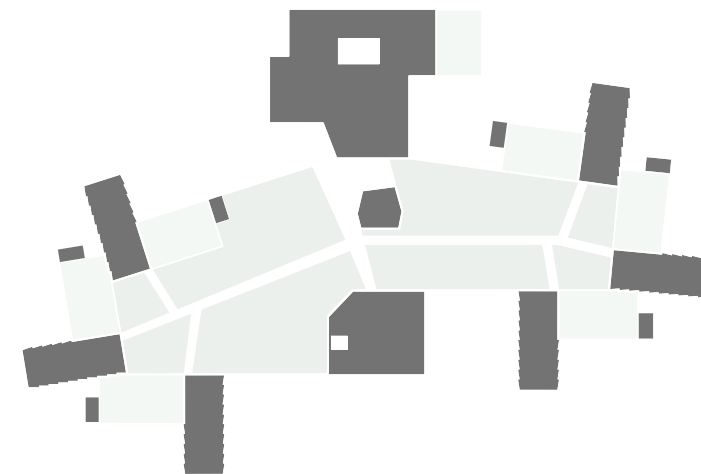


The design is flexible in relation to the number of residential units. Above are some of the possible variations of the conceptual design. In the smaller scale variation the spiritual space is incorporated into the main building. From these variations, Figure c. was chosen for further examination.



The premise for the design was to situate the accommodation units separate from one another in a manner that allows for views away from the prison and prevents direct views between the residential buildings.

2.2 General Plan



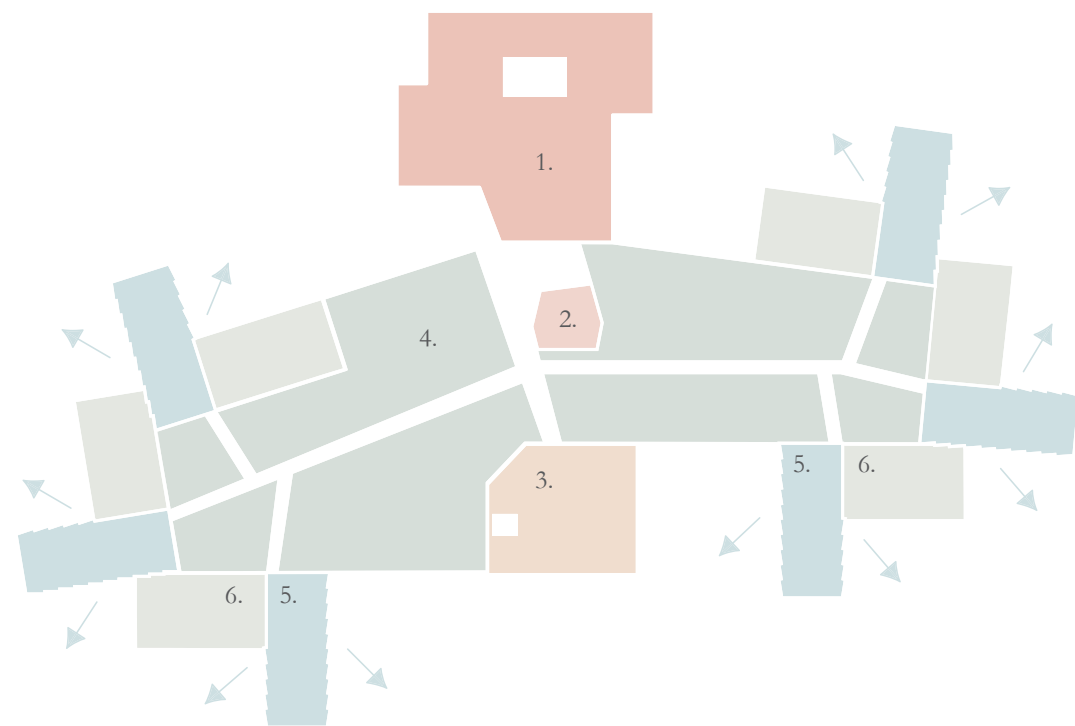


Diagram of concept layout

- | | |
|------------------------|--------------------------|
| 1. main building | 4. main courtyard |
| 2. spirituality center | 5. residential buildings |
| 3. activity center | 6. residential gardens |

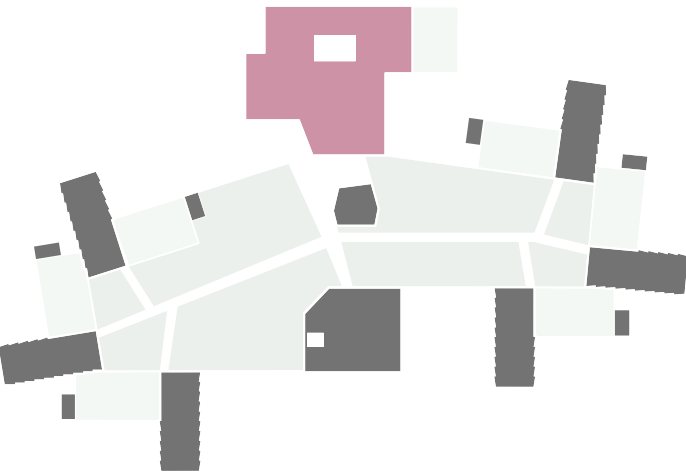
The buildings are situated in a relatively compact area, in correlation with the facility's small scale. The design's compact size ensures that distances between the buildings are not too large, which could possibly discourage their use. However, the buildings are situated far enough apart to allow for a variety of spaces and activities to occur in the main courtyard. To ensure that the area to be an open space with good sightlines, the residential buildings are scattered at the edges of the courtyard. They are situated away from the prison so that views can be directed towards the surrounding environment creating a connection with the outside world. The communal buildings are located at the heart of the plan so that they can easily be accessed from all areas.



Site plan

The campus style plan consists of buildings scattered around the site in varying size and form. In total there are nine buildings not including the prison gate building and smaller outbuildings. Between the buildings is the main yard. A garden landscape of different spaces including seating areas, outdoor gym, basketball court, flower gardens, apple orchards, and grass areas. The spaces are connected through the main walkway and meandering jogging path that go around the garden. The main yard is separated from the outer region. Access to this area is more restricted. The landscape is in a natural state, providing contrasting scenery to the more maintained landscape of the main courtyard. Surrounding the site is the outer perimeter fence. The fence works as a barrier without blocking views through it and by utilizing surveillance technology, excessive barriers can be discarded and the fence can be similar in appearance to those found in tennis courts. The style of fence helps create a more normalized environment and further aid the facility in fitting into its surroundings. (Office of the Inspector of Custodial Services, 2012)

2.3 Main Building





Extract of the facility's entrance

Arrival

Women's entrance to prison can be a traumatizing experience and careful considerations must be made in making the process as swift and pleasant as possible. When arriving at the facility women are encouraged to do so independently, sober and accompanied by a family member or friend, and those who are incapable of arriving by themselves or transferring from another location are escorted on site by arranged transportation. The registry entry for women is intentionally placed apart from the visitor and staff entrances to quiet the entrance area. Benches are arranged along the pathway to ensure individuals with a moment to gather their breath and prepare themselves, to step inside. Once inside the women are greeted by encouraging staff. The registry lobby is designed with a civic presence with soft detailing that creates a calm and welcoming atmosphere. Upon arrival women are clearly informed of the following procedures and what to expect along with clear detailed information. For family members there is information available. The process of guiding women from arrival to the accommodation units are done with as much dignity and respect as possible.

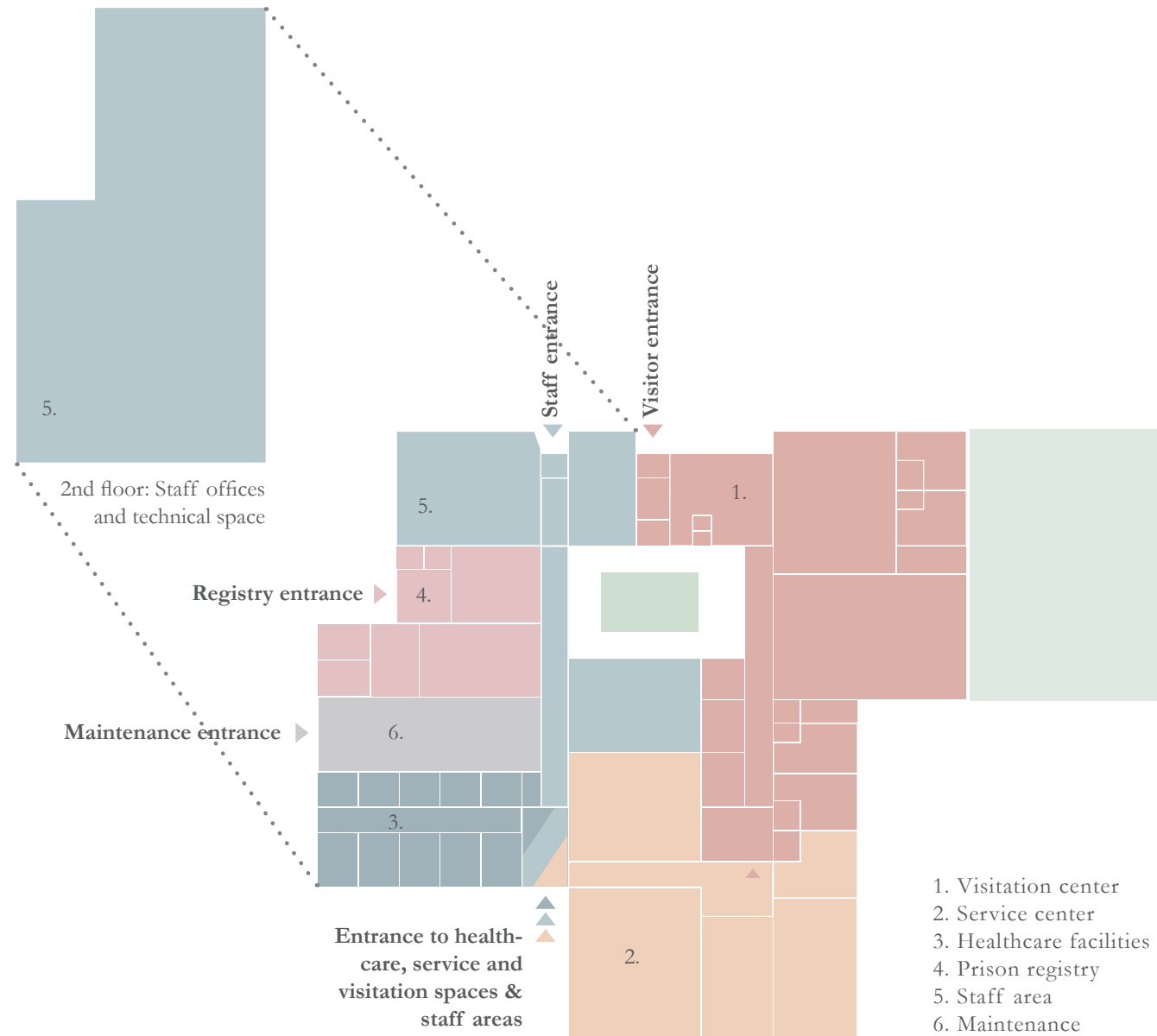


Diagram of the main building’s different facilities

- Visitation center:** Composes of different indoor and outdoor spaces where women are able to interact with their friends and family. Liminal spaces where the inside prison facility and outside world meet. Women access the visitation center through the service space.
- Service center:** These spaces comprise of the prison canteen from where women can buy groceries and other necessities, workshop spaces and multipurpose rooms.
- Healthcare facilities:** The overall health of women in prison is concerningly poor (Viitanen, 2013) and easy access to healthcare is a necessity.
- Prison registry area:** The registry area is made up of the small entrance lobby, storage of personal belongings, and waiting rooms.
- Staff area:** Well motivated staff can have a positive impact on individuals in prison (Gleeds et al., 2016). Therefore it is important for staff to have well designed spaces that promote staff wellbeing. Staff spaces include office spaces, staff rooms, social facilities etc.
- Maintenance space:** Maintenance spaces are accessible through the maintenance yard from the outside. These spaces include spacious area for goods entrance and different storage rooms.

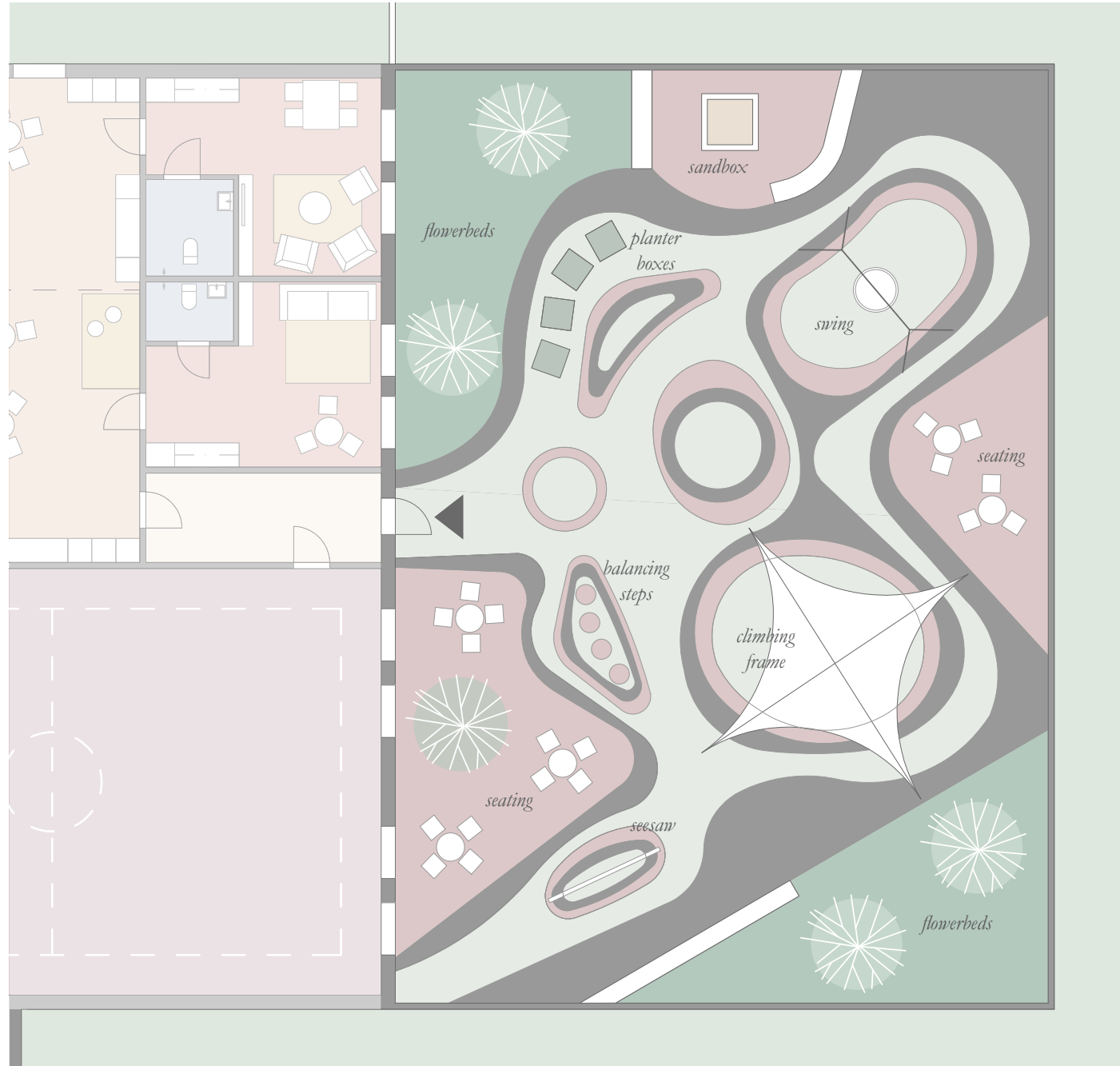


Plan of the visitation center

Visitation Center

Meaningful visits with family and friends are fundamental for the wellbeing of women in the institute. Maintaining or fixing these family ties can offer women hope and can have positive impacts on reintegrating into society. (Gleeds et al., 2016) To ensure frequent visits, the visitation process is made to be non-intimidating and simple. The entrance into the visiting center is clearly marked and the entrance is made inviting with well-maintained greenery, seating areas, and stone-pavements. Entering prison for the first time even as a visitor can be a nerve racking experience which is why there are large windows into the waiting area next to the entranceway. These windows permit transparency into the facility and allow for visitors to see and prepare themselves for the space they are entering. The main control center of the visitation center is also located next to the main entrance. When the individual enters the waiting area, they are greeted by welcoming and encouraging reception staff who are present and not separated by impermeable glass screens. Security protocols are kept at minimum in effort to avoid secondary stigmatization. From the waiting area visitors are escorted to either to the visitor hall, private family or partner rooms, or to small visitor rooms.

The visitor hall is a space of interaction with comfortable seating, small kitchens where visitors and residents can prepare coffee or tea for themselves and notably a space that invites children to play. Many of the women inside the facility are mothers that is why it is important to acknowledge a children's perspective in the design. Visitor hall is made child friendly with the use of color accents, soft carpet areas for play, and engaging child friendly furniture. The space can be divided into two when needed and chairs and table are movable to provide flexibility. Gym and outdoor spaces are accessible from the visitor hall. The family rooms are adjacent to the hall and families have an option of utilizing both spaces. They also have access to the gym and outdoor areas. The small visitor rooms vary in formality, from a more relaxed discussion area that is used for example as peer support space between women who have gone through the process of incarceration and women who are currently residing in the facility, to a more standard meeting room. The standard meeting room can be divided by a glass screen if seen necessary. The interior aesthetics of the visitor center compose of natural materials such as wood, earth tones, art on walls, and soft furnishings that together contribute to creating a soothing environment.

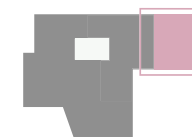


Plan of the visitation playground



Visitation Playground

The visitation playground is an enclosed space that allows mothers to interact with their children outside. The playground's colorful safety surfaces with distinctive patterning creates a fun and interesting space for the children to play in. The yard contains various playground equipment that is suited for children of different ages. In addition to playground equipment the space contains small planter boxes where children can grow flowers and vegetables with their mothers and observe the plants growth during their visits. Greenery such as trees provide some shade and make the space more inviting. Various seating arrangements allow for mothers and visitors to interact with each other and for the space to be utilized by women without children as well.



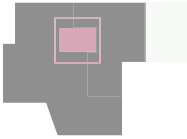
Situation diagram



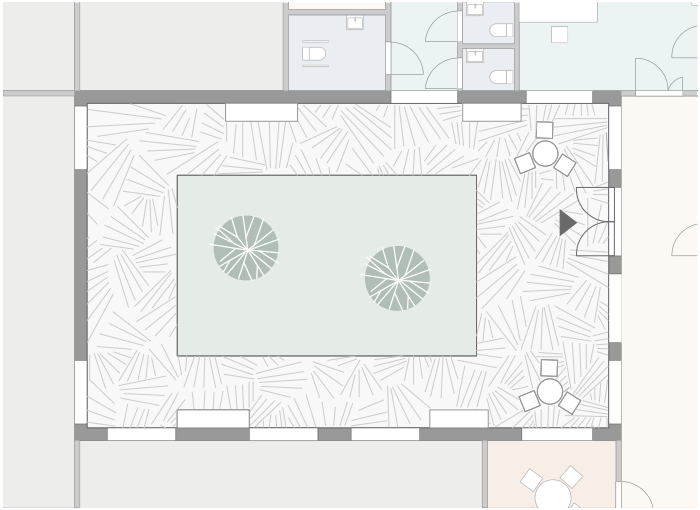
View of visitation courtyard

Visitation Courtyard

The inner courtyard provides an alternative outdoor space for women and visitors. It is a quieter visitation yard, which provides a space for the users to lounge, converse, drink coffee, or to simply sit on grass during summertime. While the courtyard is not covered, and its primary use is during the summer the courtyard facilitates natural light throughout the year into the surrounding spaces inside the building.

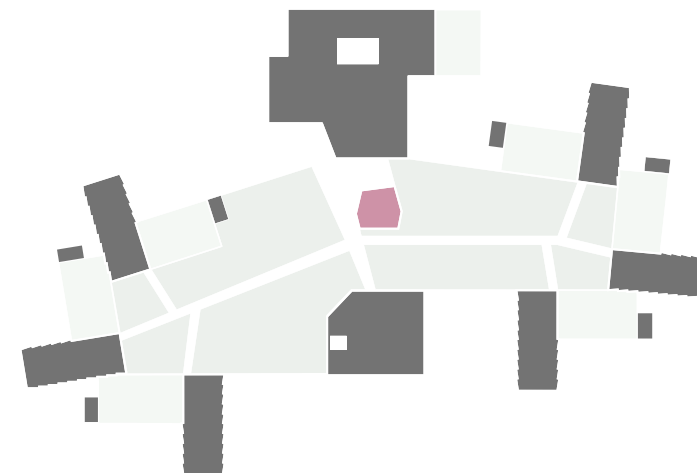


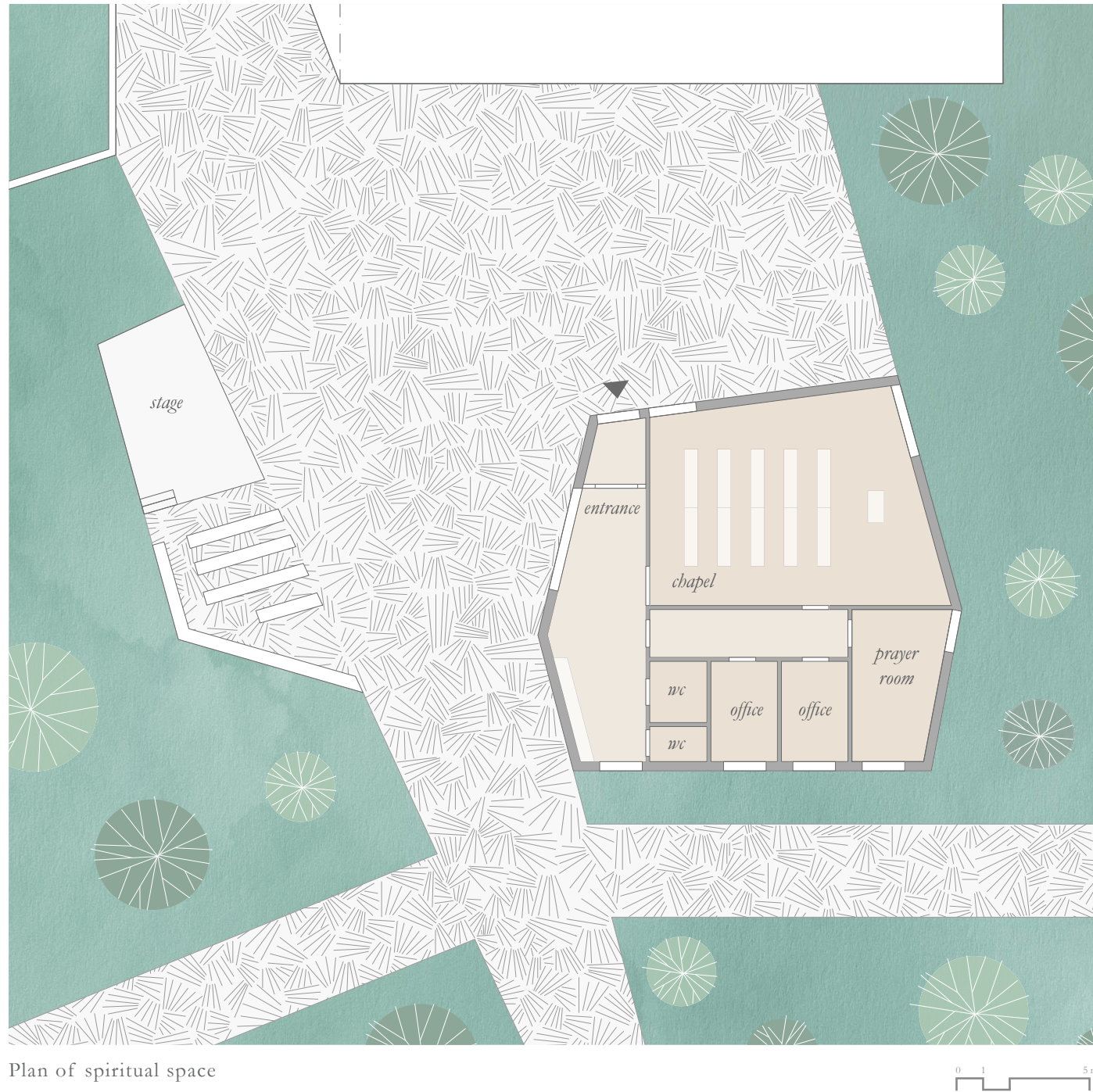
Situation diagram



Floor plan of visitation courtyard

2.4 Spirituality Center

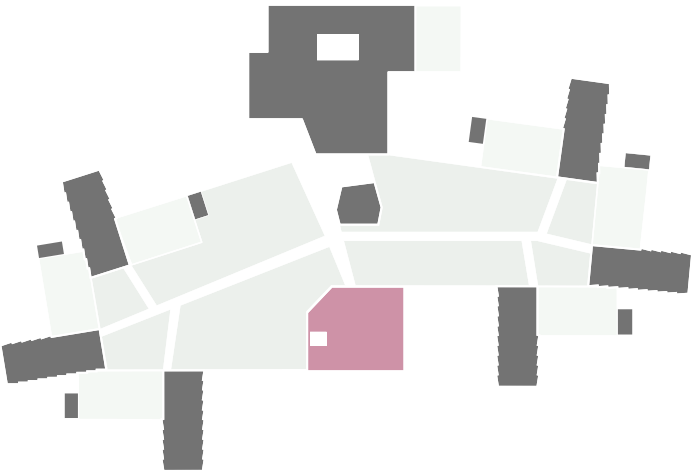




Plan of spiritual space

During the mentally difficult life situation of imprisonment, spirituality is an important resource. Individuals have the right to religious practices which are not limited to Christianity;(Rikos-seuraamuslaitos, 2019a) the design of the space acknowledges and respects different religious beliefs equally. The plan consists of two spiritual areas, a chapel and prayer room, that are both devoid of religious artifacts. The support provided by spiritual work is also often psychosocial, where a person is met holistically with her individual needs. It can be noted that spiritual work is related to e.g. mental health, substance abuse, child and family work as well as social work (Rikosseuraamuslaitos, 2019a). To support this the design has two office spaces for prison pastors and third-party workers, where women can meet individually. Because of the building's central location, the angles of the building's corners are obtuse to provide better sightlines. Adjoined to the spiritual building is the main courtyard's square. The square and its stage are intended for a variety of uses. The spaces can be used for, for example, performances, workshops, group fitness lessons, flea markets or other activities arranged by third party members.

2.5 Activity Center



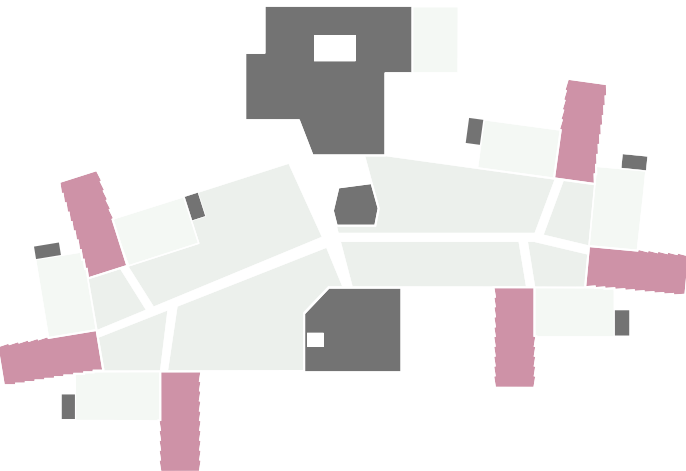


Plan of activity building



Sports and recreational activities have a positive impact on an individual’s mental and physical wellbeing. They are linked to reducing stress and anxiety, decreasing depression and feelings of hopelessness, and reducing insomnia.(Meek & Lewis, 2012) The activity building presents women with an assortment of recreational activities. At the entrance of the building is the library area that can be utilized for work and study. At the core of the structure is the lobby and activity area. The lobby is a relaxed space that can function as a gallery space or a recreational area with different activities such as ping-pong tables. Physical exercise is practiced in the gym or sports hall. The sports hall also operates as a performance and gathering space. Additional spaces include rooms for music practice, hand-craft, storage and changing rooms. Staff are able to use the building’s facilities in their free time to increase use of facilities and possibly to increase health and job satisfaction.

2.6 Residential Buildings





Extract of general plan

The residential buildings are situated at the ends of the main courtyard. In the concept design there are six residential buildings with ten rooms in each building. Each building has a private garden with an outdoor sauna and greenhouse. The buildings are situated in the plan so that views from one residential building or garden to another are minimized for security and privacy purposes. The entrances and facades of the buildings bring variation to the perimeter of the main courtyard.



Diagram of residential building



Women spend the majority of their day in the residential building and thus the building provides significant opportunities for wellbeing. As a space, it is a mixture of communal and private areas where sleeping, eating, study and work occur. The building consists of individual rooms, a communal kitchen and living room, recreational space, staff office, and a laundry room. Adjoining the residential building is the residential garden. Movement inside the building is not restricted except for staff space and personal rooms. The building layout allows for flexibility in the number of rooms per unit. Rooms can be added or removed from the plan based on need. However, it is not recommended to grow the number of rooms excessively in order to avoid overcrowding and unwarranted group sizes.



The building layout, with its communal spaces at the heart of the building, is intended to provide meaningful interactions between the women and staff. The openness of the plan, with clear sightlines offers women a feeling of safety and allows staff necessary supervision. Additionally, the design layout aids in minimizing bullying by avoiding narrow corridors and by providing secondary exit ways in tight spaces. Even though the staff have their own office spaces, they are mainly present alongside the women for the majority of the time in order to amplify natural positive interactions and lower tension.

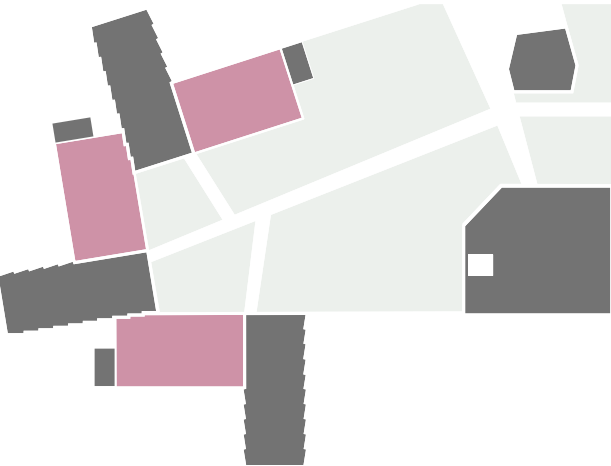
The kitchen and laundry areas allow women agency: to take care of themselves, and to practice life skills. Food is mainly prepared together in the building. Herbs and vegetables are utilized from the garden. In the layout there are a variety of options of lounge areas. The area between personal rooms is planned to be a quieter space for reading or small group work. The space can be enclosed off from the main communal areas by a glass door to control noise levels. Variety in seating areas alleviates tension by allowing women different levels of participation and the option of having quieter alone time outside their room. The recreational room is a multipurpose space that can be used for exercise, teaching, or painting.

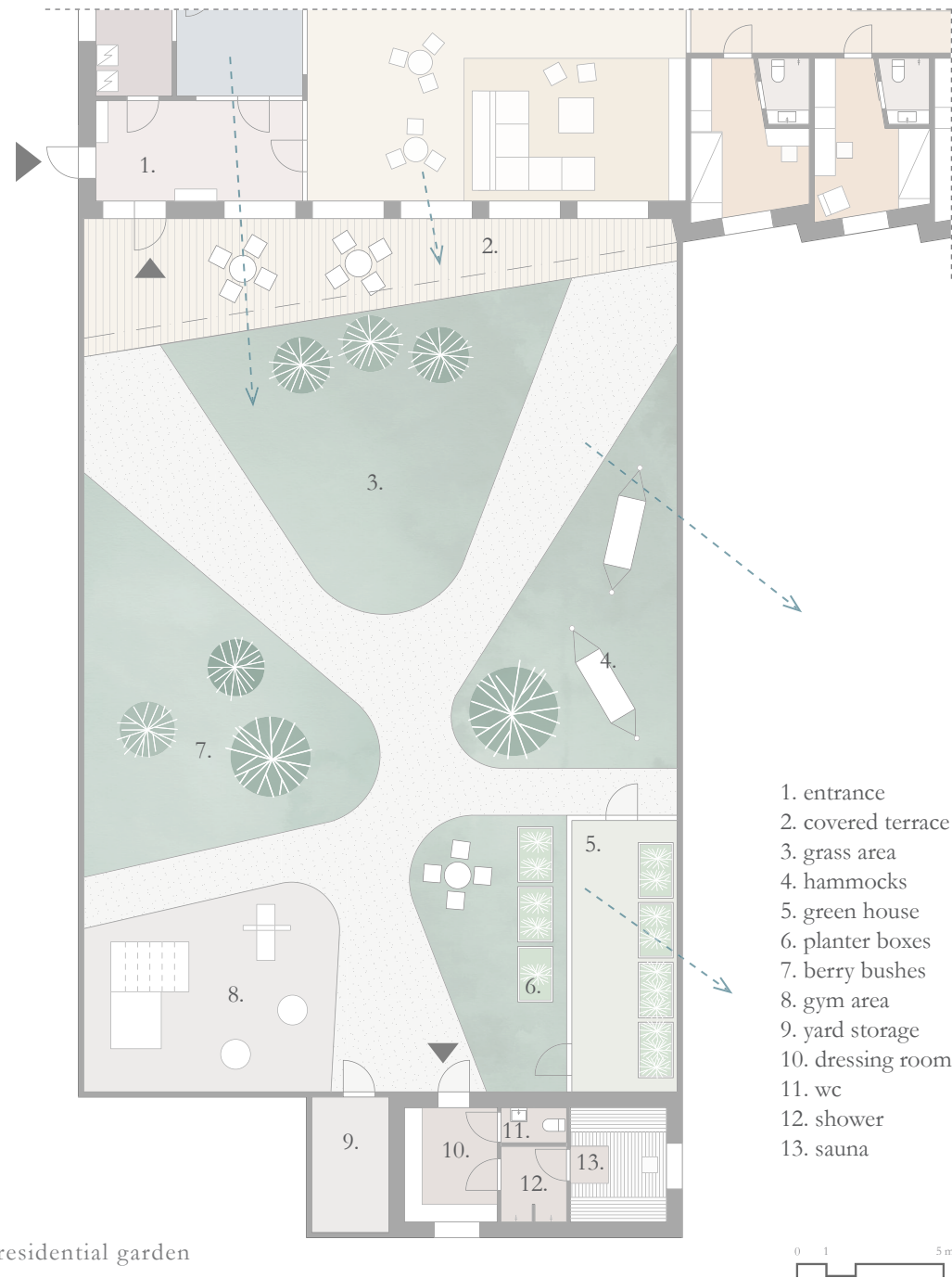


View of the residential building's communal space

Abundant natural light is an important component for wellbeing (Ulrich et al., 2008) which is factored into the design of the residential building. Large windows are situated on both sides of the communal space providing views outside towards the garden areas and the surrounding nature. In the quieter communal space, skylight is utilized to improve visual comfort and to add light and distinctiveness to the space. The aim for the interior is to create a domestic feel with the use of soft furnishings, artwork on walls and comfortable furniture. The design applies ideas from knowledge on biophilia and indoor plants and views towards the surrounding nature are implemented into the plan.

2.7 Residential Gardens





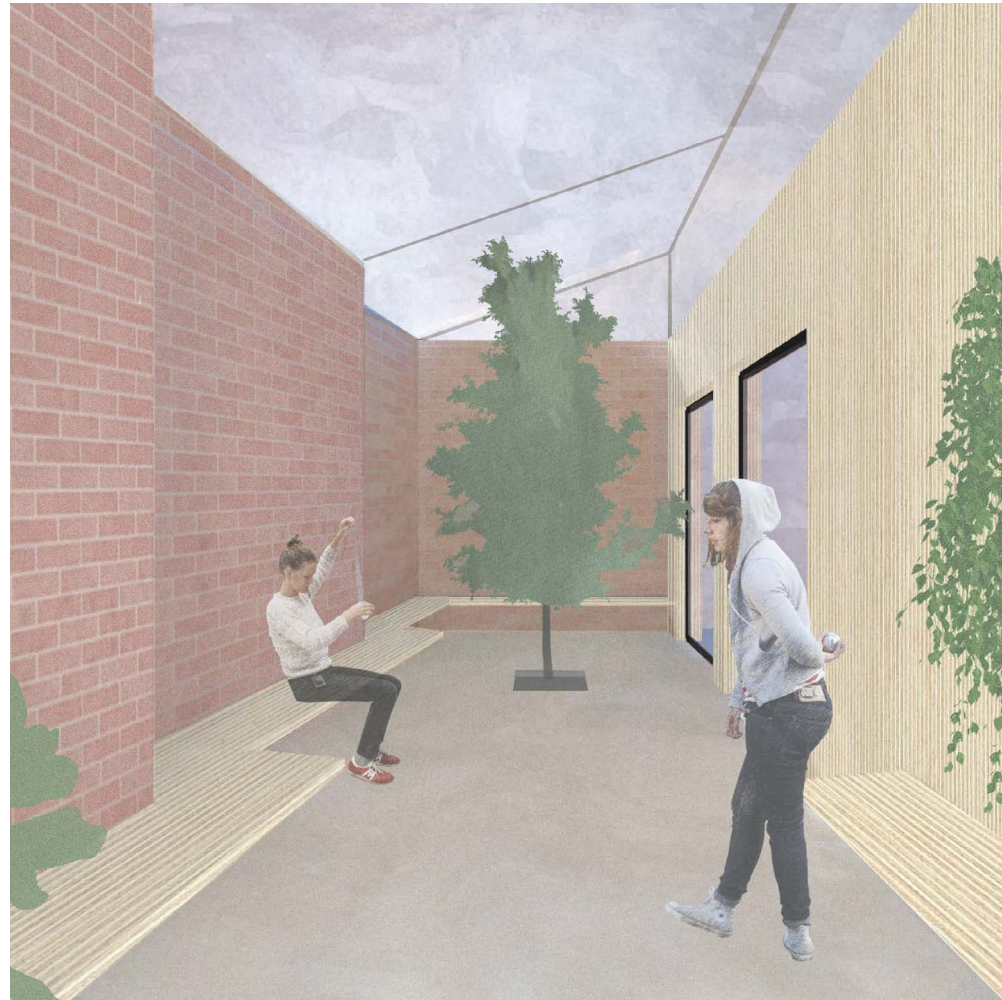
Plan of the residential garden

The aim of the residential garden is to provide individuals with various activities in a soothing environment that encourages people to be outside. A garden that offers women more to do than just to smoke. Spaces that are curated for the women to use as they wish and without restricting movement between the residential building and garden. It was important to create an environment that feels safe with clear sight-lines and appropriate lighting. Good lighting not only offers safety but extends the use of the garden beyond summertime and allows for the garden to be enjoyed during the evening from the inside. Good visibility of the garden from the inside also ensures better staff monitoring. The design incorporates both active and passive areas that allow for individual or communal use. Active spaces such as the exercise area invites women to take care of their physical wellbeing, while passive areas offer opportunities for tranquility and contemplation. Women are involved in taking care of the garden and opportunities for green care are provided through berry bushes, vegetable patch and green house.



View of residential garden

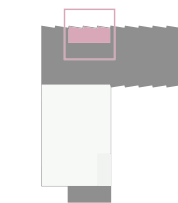
The lush and colorful plantings of the garden create a space that is varied and eye-catching. While insect hotels and bird feeders in the garden bring liveliness and offer individuals with more to look at. The garden area is enclosed by the sauna building, greenhouse, and perimeter fence. The atmosphere of the garden tries to create an impression of an intimate fenced courtyard instead of a securitized bare exercise yard that tends to be typical of prisons. Hence, the garden wall is high enough to provide privacy, but not too high to be a constant reminder of imprisonment. Part of the fence is made from wood battens which along with the glass greenhouse provides views towards the surrounding nature. The sauna building at the end of the garden provides a place for socialization or meditation and self-contemplation.



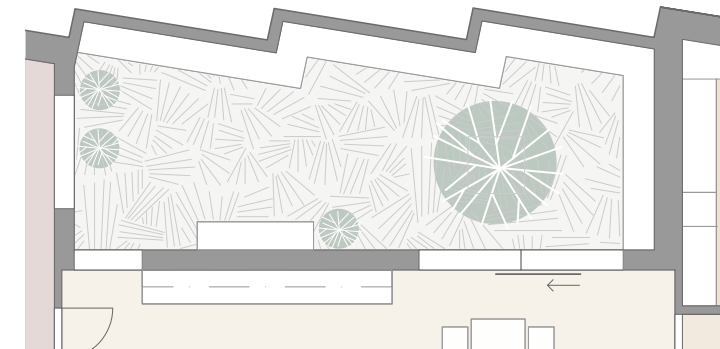
View of the small courtyard

Small Courtyard

The residential building's small courtyard is by nature a more intimate and calmer space. There are intentionally no activities placed within, for it is intended to function as a quiet place for tranquil conversations and contemplation. The courtyard serves both as a retreat space for solitude, for one-on-one discussions or talks among small groups. A glass ceiling covers the courtyard. Not only does it lengthen the use of the space during the year, but it also cancels noise, providing intimacy for private conversations in cases where the area is connected to a neighboring yard.



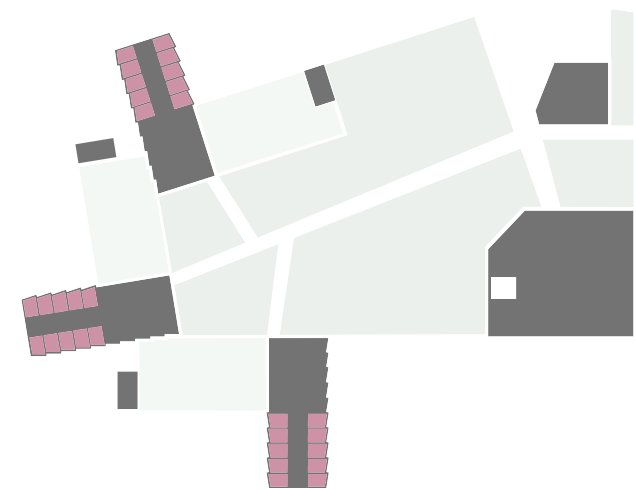
Situation diagram



Extract of small courtyard

0 1 5 m

2.8 Residential Rooms





View of a residential room

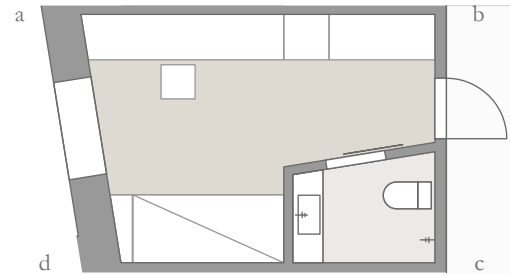
As members of society, we are entitled to privacy. In prison, personal rooms can be used to provide individuals with refuge in the overwhelming experience of incarceration. They are private spaces, and it is important for that privacy to be respected. Staff are encouraged to knock before entering and other women do not have access or rights to other's rooms. If room searches are conducted, they are to be always completed by female staff and belongings are to be carefully placed back in order. The doors can be locked and opened from the inside and individuals do not need to rely on others for their comings and goings. While there are sightlines to all other parts of the building, there are no direct views into the personal rooms. The outer parts of the doors are made from wood instead of metal that is often associated with imprisonment. When a person enters their room, they are greeted by natural light coming through a tall window that is clear of bars. The interior of the room is aesthetically pleasing with views towards the surrounding nature. The slanted bathroom wall creates a more open feeling for the room and provides better sightlines from the entrance way. The outer walls of the rooms are additionally slightly slanted to direct views away from the yards towards the surrounding landscape and ensuring more privacy for the rooms from outside communal spaces.



Wall projection a-b



Wall projection c-d



Floor plan of Room 1

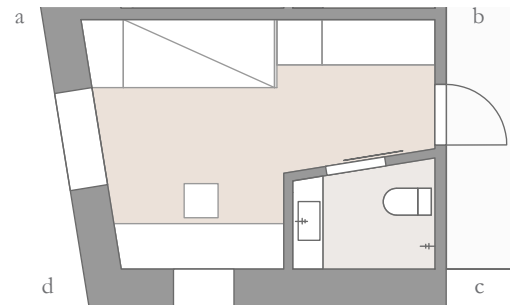
Room 1:
The room is equipped with a longer desk.



Wall projection a-b



Wall projection c-d



Floor plan of Room 2

Room 2:
The rooms at the end of the building have an additional window.



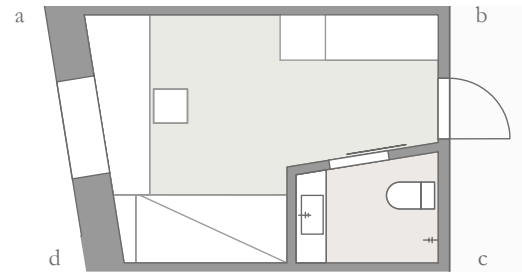
The rooms are equipped to similar fashion to what is expected of rooms in university residences. They include a bed, desk, cupboards, high window, and a private bathroom with a shower. The layout of the room ensures that there is enough space for movement such as exercise and stretching. During the day, the beds can easily be transformed into a sofa, which allows for a distinctiveness between night and day. Suitable sleep conditions are ensured through curtains to control natural light and adequate decibel measures for inner walls and room doors. The window can be opened slightly for fresh air and more importantly, to add to the opportunities of agency in the room. Individuals also have the opportunity to control the atmosphere of the room through lighting by intensifying or dimming the lights or by adjusting the light's color tone from warm to cold. The variation of the rooms both artificial and natural light spectrums improve visual comfort and circadian rhythms.(Matter Architecture et al., 2017) Computer terminals are incorporated into the rooms allowing women restricted access to the facility's internet. This has many beneficial qualities such as maintaining better contact with families -for example, mothers are able to read bedtime stories to their children from their rooms-, fill out different forms and applications, and improve their digital skills.(Criminal sanctions agency, 2020)



Wall projection a-b



Wall projection c-d



Floor plan of room 3

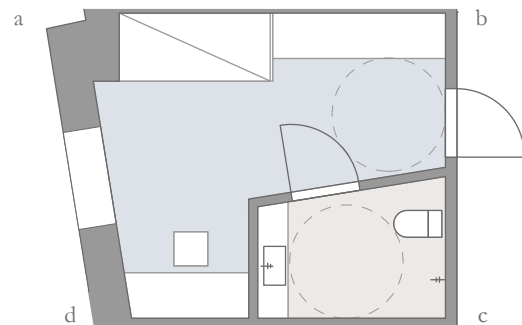
Room 3:
In this room the desk is situated in front of the window.



Wall projection a-b



Wall projection c-d



Floor plan of room 4

Room 4:
Room 4 is an example of an accessible room. Accessible rooms can be incorporated easily into the design. The rooms are equipped with either a left or right handed accessible bathroom.



The furnishings of the rooms are not identical. The intention behind this is to lessen the institutional feel of the building and - along with resident's own personalization help - provide individuals with some sense of ownership over their rooms. Opportunities for personalization are offered through different furnishings such as bed linens, curtains, carpets, displaying personal belongings and by adjusting the room's atmosphere through lighting. Colored notice boards allow for, for example, children's artwork or photographs to be hung up and can be utilized for studies or work. The room has suitable space to store personal possessions with furniture that is durable and safe and made from natural materials. The overall color schemes of the rooms are soothing with the use of natural colors and materials.

Discussion

The literary background section of the thesis demonstrates that there is an urgent need for a female specific approach in prison design. Our prison systems strive to be gender neutral, but in these institutional structures where men are the vast majority, women are often marginalized with their needs unmet. Currently many female wards in male prisons are inadequate at accommodating women. These spaces have not been designed to house women and are poorly transferred to do so. Even though it is important for prisoners to be situated close to their families, which has been the main reasoning in placing women in separate wards in male prisons, experts specialized in female prisoners believe it would be more beneficial for women to be placed in female-only prisons. These female-only facilities would focus on the needs of women, have lower security requirements, and have specialized staff, services and programs focused on female specificity.

Researching female prisons and prisoners has been an eye-opening experience. Reading these women's stories, from whom we so rarely hear, has been a lesson on empathy. Female prisoners are a vulnerable group with histories of trauma, substance abuse, mental illnesses, poor work

ability, and complicated questions regarding motherhood. Many female inmates find the experience of incarceration traumatic, carry a lot of shame and find it difficult to return to society. In my conceptual design I propose that well thought out architecture has the potential to aid women in reintegration and that good architecture has the capacity to help regain a certain degree of dignity and provide opportunities for hope. In the design I aim to create a prison for women that is centered around wellbeing. Unfortunately, there was not much research to be found on design attributes that promote wellbeing in prison environments especially concerning women and very little research regarding female inmates overall. With women often overlooked in prison design, I am interested to see how Finland's new Hämeenlinna women's prison has realized the needs of its female inmates. Fortunately, a lot of knowledge on architecture's effect on wellbeing can be applied from research in healthcare facilities, which have developed significantly further than prisons especially in recognizing the value in supporting wellbeing through architecture. I sincerely hope to see prison architecture shift further in this direction. Finding a balance between security and aesthetics.

Working on this thesis has been a growing experience. It has forced me to examine the moral and ethical role of architects surrounding prison design. At times, the questionable and problematic nature of prisons especially concerning their effectiveness in recidivism caused me to question my own involvement with choosing this topic. Regardless of whether there is such a thing as 'good' prison design, our society has had prisons and will continue to do so in the proximate future so it is important to have more discussion around what prisons could and should look like and how we can achieve better prison conditions. We also cannot rely on prisons to be the fix for society's challenges. The background section of the thesis made clear that we need to invest in more mental healthcare, substance abuse rehabilitation, and work on domestic abuse so that we can help prevent individuals from entering prison in the first place. Alongside establishing better prison conditions for women, the criminal justice system should explore wider opportunities for community service, open prison places and better acknowledgement and identification of victims of human trafficking especially in the case of women.

I started this thesis without any prior knowledge on incarcerated environments and part of the design challenges that I faced was that there were no ready examples of prisons that have been proven to work in reducing recidivism. The few prisons that were labeled as progressive and humane rarely catered for women in particular. I wish to see women's needs highlighted more in prison research and design. What I learned from this experience is that prison design requires a great deal of humility. Prison history is full of examples where there have been new innovations that have been believed to be transformative but ended up being hurtful for inmates. Prison environments have a substantial impact on the people who occupy them. I hope future prisons are designed with the intent on wellbeing, thus bringing forth steps toward progressive change in both prison architecture and organization as well as public view so that well thought out prison design could essentially be more than putting lipstick on a pig.

References

Bartels, L., & Gaffney, A. (2011). *Good practice in women’s prisons: A literature review*. Australian institute of criminology. https://www.ics.act.gov.au/__data/assets/pdf_file/0020/1326044/Good-practice-in-womens-prisons.pdf

Basalo, A. G. (2017). The design of women’s prisons. In P. H. Van kempen & M. Krabbe (Eds.), *Women in prison: The Bangkok rules and beyond* (Frist edition, pp. 161–173). Intersentia.

Bloom, B., & Covington, S. (1998, January). *Gender-specific programming for female offenders: What is it and why is it important*. Annual meeting of the American Society of Criminology, Washington, D.C. <https://www.centerforgenderandjustice.org/assets/files/13.pdf>

Boronia Pre-Release Centre for Women. (n.d.). Paterson Architects. Retrieved February 10, 2021, from <https://www.patersonarchitects.com.au/our-work/boronia-pre-release-centre-for-women>

Building centre. (2018, March 28). *Storstrøm – ‘the world’s most humane prison’* [Video]. YouTube. <https://www.youtube.com/watch?v=-byI-3nCdoS0>

Carp, S. V., & Davis, J. A. (1989, September). *Design considerations in the building of women’s prisons*. <http://static.nicic.gov.s3.amazonaws.com/Library/010783.pdf>

C.F. Møller Architects. (n.d.). *Storstrøm prison north falster* [Press release]. https://www.euopris.org/wp-content/uploads/2018/01/Over-view-Press-Material_Storstr%C3%B8m-Prison-Falster.pdf

Cleary, B. (2018, July 1). The women’s prison where inmates aren’t locked up. Mail Online. <https://www.dailymail.co.uk/news/article-5868261/The-womens-prison-inmates-arent-locked-up.html>

Criminal sanctions agency. (2020, October 16). *New internationally innovative prison for women in Finland will modernise the operating culture of the criminal sanctions agency - rikosseuraamuslaitos* [Press release]. <https://www.rikosseuraamus.fi/en/index/topical/pressreleasesandnews/Pressreleasesandnews2020/newinternationallyinnovativeprisonforwomeninfinlandwillmodernisetheoperatingcultureofthecriminalsanction-agency.html>

De Claire, K., & Dixon, L. (2017). The effects of prison visits from family members on prisoners’ Well-Being, prison rule breaking, and recidivism: A review of research since 1991. *Trauma, Violence, & Abuse*, 18(2), 185–199. <https://doi.org/10.1177/1524838015603209>

Elliott, D. E., Bjelajac, P., Fallot, R. D., Markoff, L., & Reed, B. G. (2005). Trauma-informed or trauma-denied: Principles and imple-mentation of trauma-informed services for women. *Journal of Community Psychology*, 33(4), 461–477. <https://doi.org/10.1002/jcop.20063>

Fair, H. (2009). International review of women’s prisons. *Prison Service Journal*, 184, 3–8. https://www.prisonstudies.org/sites/default/files/resources/downloads/100047ceinternational_review_of_womens_prisons.pdf

Fairweather, L. (1961). Prison architecture in England. *The British Journal of Criminology*, 1(4), 339–361. <https://doi.org/10.1093/oxford-journals.bjc.a047113>

Fridhov, I. M., & Grøning, L. (2018). Penal ideology and prison architecture. In E. Fransson & F. Giofrè (Eds.), *Prison, Architecture and Humans* (pp. 269–286). Cappelen Damm Akademisk. <https://doi.org/10.23865/noasp.31>

Gill, N. (2019, December 9). *The Importance Of Trauma-Informed Design*. Forbes. <https://www.forbes.com/sites/forbesnonprofitcouncil/2019/12/09/the-importance-of-trauma-informed-design/?sh=5000d86b6785>

Gillis, K., & Gaterslebed, B. (2015). A review of psychological literature on the health and wellbeing benefits of biophilic design. *Build-ings*, 5(3), 948–963. <https://doi.org/10.3390/buildings5030948>

Gleeds, Steer, R., Jewkes, Y., Humphreys, K., & Goldman, M. (2016, October). Rehabilitation by design influencing change in prisoner behaviour. https://www.brighton.ac.uk/_pdf/research/ssparc/rehabilita-tion-by-design.pdf

Gleeds, Steer, R., Jewkes, Y., Humphreys, K., & Goldman, M. (2016, October). *Rehabilitation by design influencing change in prisoner behav-iour*. https://www.brighton.ac.uk/_pdf/research/ssparc/rehabilitation-by-design.pdf

Goffman, E. (1961). *Asylums* (1st ed.). Anchor Books.

Grant, E., & Jewkes, Y. (2015). Finally fit for purpose. *The Prison Journal*, 95(2), 223–243. <https://doi.org/10.1177/0032885515575274>

Hancock, P., & Jewkes, Y. (2011). Architectures of Incarceration: The spatial pains of imprisonment. *Punishment & Society*, 611–629. <https://doi.org/10.1177/1462474511422171>

Jewkes, Y., & Gooch, K. (2019, January 7). *How lessons in Scandinavian design could help prisons with rehabilitation*. IPR Blog. <https://blogs.bath.ac.uk/iprblog/2019/01/07/how-lessons-in-scandinavian-design-could-help-prisons-with-rehabilitation/>

Jewkes, Y., Jordan, M., Wright, S., & Bendelow, G. (2019). Designing ‘healthy’ prisons for women: Incorporating trauma-informed care and practice (TICP) into prison planning and design. *International Journal of Environmental Research and Public Health*, 16(20), 3818. <https://doi.org/10.3390/ijerph16203818>

Johnsen, B., Granheim, P. K., & Helgesen, J. (2011). Exceptional prison conditions and the quality of prison life: Prison size and prison culture in Norwegian closed prisons. *European Journal of Criminology*, 8(6), 515–529. <https://doi.org/10.1177/1477370811413819>

Kaap-Deeder, J., Audenaert, E., Vandevelde, S., & Soenens, B. (2017). Choosing when choices are limited: The role of perceived afforded choice and autonomy in prisoners’ Well-Being. *Law and Human Behavior*, 567–578. <https://doi.org/10.1037/lhb0000259>

Kaartamo, O., & Tapainen, J. (2019, September 4). *Suurin osa naisvangeista on paboin traumatisoituneita* [Broadcast]. <https://areena.yle.fi/audio/1-50254229>

Kaplan, R., & Kaplan, S. (1989). *The experience of nature. A psychological perspective*. Cambridge University Press.

Karthaus, R., Block, L., & Hu, A. (2019). Redesigning prison: the architecture and ethics of rehabilitation. *The Journal of Architecture*, 24(2), 193–222. <https://doi.org/10.1080/13602365.2019.1578072>

Lappalainen, T. (2018, December 18). *Palvelumuotoilun menetelmiä hyödyntäen kohti maailman parasta vankilaa*. Aalto University Executive Education. <https://www.aaltoee.fi/aalto-leaders-insight/2018/palvelumuotoilun-menetelmia-hyodyntaen-kohti-maailman-parasta-vankilaa>

Lapsiperheen arkea perheosastolla. (n.d.). Terveiden ja Hyvinvoinnin Laitos. Retrieved March 1, 2021, from <https://thl.fi/fi/web/lastensuojelun-kasikirja/tyoprosessi/erityiskysymykset/vanhemman-vankeusrangaistus/lapsi-vanhemman-mukana-vankilassa/lapsiperheen-arkea-perheosastolla>

Lattu, E. (2016). *Naisten tekemä väkivalta*. Tampere University. <http://urn.fi/URN:ISBN:978-952-03-0138-5>

Lönnberg, S. (2021, March 8). *Miksi tarvitaan nais erityisyyttä ja nais erityisiä palveluita?* Kriminaalihuollon Tukisäätiö. <https://www.krits.fi/2021/03/miksi-rikostaustaisille-naisille-tulisi-olla-erityisia-palveluita/?fbclid=IwAR2NwzfmhEL-Z8u7Wl7NJmC-bFqfjMxSkVreG2OZ-7rku0yJZEjObZ58F7Ps>

López, M. (2014, July). *How to build for success: prison design and infrastructure as a tool for rehabilitation*. Penal Reform International. <https://www.penalreform.org/blog/build-success-prison-design-infrastructure-tool-rehabilitation/>

Maggie’s. (n.d.). *Our buildings*. Retrieved January 20, 2021, from <https://www.maggies.org/about-us/how-maggies-works/our-buildings/>

Martin, D., Nettleton, S., & Buse, C. (2019). Affecting care: Maggie’s centres and the orchestration of architectural atmospheres. *Social Science & Medicine*, 240, 112563. <https://doi.org/10.1016/j.socscimed.2019.112563>

Matter Architecture, Bernheimer, L., O’Brien, R., & Barnes, R. (2017, December). *Wellbeing in prison design a guide*. http://www.matterarchitecture.uk/wp-content/uploads/2018/05/421-op-02_Design-toolkit-report-online.pdf

Meek, R., & Lewis, G. (2012). The role of sport in promoting prisoner health. *International Journal of Prisoner Health*, 8(3/4), 117–130. <https://doi.org/10.1108/17449201211284996>

Merrick, J. (2018, June 13). *Prisons of conscience: Storstrøm prison in Gundslev, Denmark by CF Møller*. Architectural Review. <https://www.architectural-review.com/buildings/prisons-of-conscience-storstrom-prison-in-gundslev-denmark-by-cf-moller>

Miller, N. A., & Najavits, L. M. (2012). Creating trauma-informed correctional care: A balance of goals and environment. *European Journal of Psychotraumatology*, 3(1), 17246. <https://doi.org/10.3402/ejpt.v3i0.17246>

Ministry of Justice, Finland. (2020, July). *Imprisonment Act*. <https://finlex.fi/en/laki/kaannokset/2005/en20050767.pdf>

Moran, D. (2011). Between outside and inside? Prison visiting rooms as liminal carceral spaces. *GeoJournal*, 78, 339–351. <https://doi.org/10.1007/s10708-011-9442-6>

Moran, D., & Jewkes, Y. (2017). Prison architecture and design: Perspectives from criminology and carceral geography. In A. Liebling, S. Maruna, & L. McAra (Eds.), *Oxford Handbook of Criminology* (pp. 541–561). Oxford University Press.

Moran, D., Jewkes, Y., & Lorne, C. (2019). Designing for imprisonment: Architectural ethics and prison design. *Architecture Philosophy*, 4, 67–81. <https://core.ac.uk/download/pdf/185488496.pdf>

Moran, D., Pallot, J., & Piacentini, L. (2013). Privacy in penal space: Women’s imprisonment in Russia. *Geoforum, Volume 47*, 138–146. <https://doi.org/10.1016/j.geoforum.2013.01.002>

Moran, D., & Turner, J. (2019). Turning over a new leaf: The health-enabling capacities of nature contact in prison. *Social Science & Medicine, Volume 231*, 62–69. <https://doi.org/10.1016/j.socscimed.2018.05.032>

Myers, H., Segal, L., Lopez, D., Li, I. W., & Preen, D. B. (2017). Impact of family-friendly prison policies on health, justice and child protection outcomes for incarcerated mothers and their dependent children: A cohort study protocol. *BMJ Open*, 7(8), e016302. <https://doi.org/10.1136/bmjopen-2017-016302>

Naiset näkyviksi. (2008). *Työryhmä mietintö*. Rikosseuraamusvirasto. https://www.rikosseuraamus.fi/material/attachments/rise/julkaisut-ri-senjulkaisusarja/6Bzt9MvIM/3_2008_Naiset_nakyviksi.pdf

Naiset näkyviksi. (2020). *Rikostaustaiset naiset asiakkaina*. Kriminaalihuollon tukisäätiö. <https://www.krits.fi/wp-content/uploads/2020/12/Rikostaustaiset-naiset-asiakkaina.pdf>

New parliamentary ombudsman: Finnish prison cells violate human rights. (2009, December 3). Yle Uutiset. https://yle.fi/uutiset/osasto/news/new_parliamentary_ombudsman_finnish_prison_cells_violate_human_rights/5965686

Norwegian Parliamentary Ombudsman. (2016). *Women in prison, A thematic report about the conditions for female prisoners in Norway*. https://www.sivilombudsmannen.no/wp-content/uploads/2017/05/SIVOM_temarapport_ENG_WEB_FINAL.pdf

Office of the Inspector of Custodial Services. (2012). *Report of an announced inspection of boronia pre-release centre for women*. Government of Western Australia. [https://www.parliament.wa.gov.au/publications/tailedpapers.nsf/displaypaper/3815132a88eca9e8c405a-54c48257a760026d306/\\$file/5132.pdf](https://www.parliament.wa.gov.au/publications/tailedpapers.nsf/displaypaper/3815132a88eca9e8c405a-54c48257a760026d306/$file/5132.pdf)

Owen, B., Wells, J., & Pollock, J. (2017). *In Search of Safety: Confronting Inequality in Women’s Imprisonment (Volume 3) (Gender and Justice)* (First ed.). University of California Press.

Raskin, L. (2019, October 20). *How Maggie’s Centres Help Cancer Patients Find Strength from Within*. ArchDaily. <https://www.archdaily.com/926789/how-maggies-centres-help-cancer-patients-find-strength-from-within>

Rikosseuraamuslaitos. (2019a). *Hengellisen työn ja vankilasielunhoidon linjaukset*. https://www.rikosseuraamus.fi/material/attachments/rise/julkaisut-muut/s2DDbAUGh/Hengelliset_linjaukset_v1_netti.pdf

Rikosseuraamuslaitos. (2019b). *Rikosseuraamuslaitoksen tilastoja*. https://www.rikosseuraamus.fi/material/attachments/rise/julkaisut-ti-lastollinenvuosikirja/pjx6k2qbp/Rikosseuraamuslaitoksen_tilastollinen_vuosikirja_2019_ISSN_2242-6957_verkkojulkaisu.pdf

Rikosseuraamusvirasto. (2008). Naiset näkyviksi. https://www.rikosseuraamus.fi/material/attachments/rise/julkaisut-risenjulkaisusarja/6Bzt9MvIM/3_2008_Naiset_nakyviksi.pdf

Sachs, N. A., & Shepley, M. M. (2019). Design attributes for improved mental and behavioral health. In D. Battisto & J. J. Wilhelm (Eds.), *Architecture and Health* (1st Edition, pp. 75–97). Routledge. <https://doi.org/10.4324/9780429021169>

Salingeros, N., & Masden, K. (2008). Neuroscience, the natural environment, and building design. In *Biophilic Design: The Theory, Science and Practice of Bringing Buildings to Life*, 59–83. <https://patterns.architexturez.net/doc/az-cf-172538>

Salomone, J. (2004). *Towards best practice in women’s corrections: The Western Australian low security prison for women*. Perth, W.A: Department of Justice. https://web.archive.org/web/20180313173224/https://www.correctiveservices.wa.gov.au/_files/about-us/statistics-publications/students-researchers/towards-best-practices.pdf

Salonen, V. (2018, December 27). Hämeenlinnan vankila suljetaan sisäilmaongelmien vuoksi. *Hämeen Sanomat*. <https://www.hameensanomat.fi/kanta-hame/hameenlinnan-vankila-suljetaan-sisailmaongelmien-vuoksi-kaikki-vangit-siirretaan-muualle-henkilokunnalle-etsitaan-vaistotiloja-456303/>

Salovaara, U. (2019a). *Rikoksista tuomitut naiset : Yhteisöstä erottaminen ja takaisinliittymisen mahdollisuudet*. Jyväskylä University. <http://urn.fi/URN:ISBN:978-951-39-7685-9>

Salovaara, U. (2019b, April). *Päihteet ja naiserytyisyys*. Haaste. <https://www.haaste.om.fi/fi/index/lehtiarkisto/haaste42019/paihteetjanaiserityisyys.html>

Schubert, E. C., Duininck, M., & Shlafer, R. J. (2016). Visiting Mom: A pilot evaluation of a prison-based visiting program serving incarcerated mothers and their minor children. *Journal of Offender Rehabilitation*, 55(4), 213–234. <https://doi.org/10.1080/10509674.2016.1159641>

Should prisons have trees? (2018, May 23). Carceral Geography. <https://carceralgeography.com/2018/05/23/should-prisons-have-trees/>

Ståhlberg-Aalto, F. (2019). *The aesthetics and architecture of care environments*. Aalto University. <https://aaltodoc.aalto.fi/bitstream/handle/123456789/40965/isbn9789526087368.pdf?sequence=1&isAllowed=y>

Tammi-Moilanen, K. (2020, October). *Naisvankiselvitys*. Rikosseuraamuslaitos. https://www.rikosseuraamus.fi/material/collections/20201019102643/7LDL7zoyH/Naisvankiselvitys_-_Selvitys_naisvankien_olosuhteista%2C_toiminnoista_web.pdf

TedX Talks. (2018, July 26). *Maggie’s - architecture of hope* | Sarah Beard | TEDxSwansea [Video]. YouTube. <https://www.youtube.com/watch?v=fUHZ5RUJ3Fc&t=2s>

The Danish maximum-security prison where wellbeing comes first. (2018, February 7). Design Crucial. <http://www.designcrucial.com/news/storstrm-prison-by-cf-mller-6040669/>

Ulrich, R. S. (2002). *Health benefits of gardens in hospitals*. https://www.researchgate.net/publication/252307449_Health_Benefits_of_Gardens_in_Hospitals

Ulrich, R. S., Simons, R. F., Losito, B. D., & Fiorito, E. (1991). Stress Recovery During Exposure to Natural and Urban Environments. *Journal of Environmental Psychology*, 11(3), 201–230. [https://doi.org/10.1016/S0272-4944\(05\)80184-7](https://doi.org/10.1016/S0272-4944(05)80184-7)

Ulrich, R. S., Zimring, C., Zhu, X., & DuBose, J. (2008). A review of the research literature on Evidence-Based healthcare design. *HERD*, 1(3), 61–125. <https://doi.org/10.1177/193758670800100306>

United Nations Office for Project Services (UNOPS). (2016). *Technical guidance for prison planning*. https://content.unops.org/publications/Technical-guidance-Prison-Planning-2016_EN.pdf?mtime=20171215190045

Van der Linden, V., Annemans, M., & Heylighen, A. (2016). Architects’ approaches to healing environment in designing a maggie’s cancer caring centre. *The Design Journal*, 19(3), 511–533. <https://doi.org/10.1080/14606925.2016.1149358>

Vanhemmuuden hoitaminen vankilassa. (n.d.). Kriminaalihuollon Tukisäätiö. Retrieved March 8, 2021, from <https://www.krits.fi/tietoa/perhe-ja-parisuhde/vanhemmuuden-hoitaminen-vankilassa/>

Vaswani, N., & Paul, S. (2019). It’s knowing the right things to say and do’: Challenges and opportunities for trauma-informed practice in the prison context. *The Howard Journal of Crime and Justice*, 58(4), 513–534. <https://doi.org/10.1111/hojo.12344>

Viitanen, P. (2013). *The health, work ability and healthcare needs of finnish female prisoners* (Academic Dissertation). University of Tampere. <https://trepo.tuni.fi/handle/10024/68299>

Wener, R. E. (2012). *The environmental psychology of prisons and jails: Creating humane spaces in secure settings*. Cambridge University Press.

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Figure 1: Diagram of prison typologies, Aino Telama

Figure 2: Storstrøm Prison, C.F. Møller Architects, Photographer: Torben Eskerod
URL https://www.europpris.org/wp-content/uploads/2018/01/Overview-Press-Material_Storstr%C3%B8m-Prison-Falster.pdf

Figure 2: Storstrøm Prison, C.F. Møller Architects, Photographer: Torben Eskerod
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Figure 3: Boronia Pre-release Center for Women, Paterson Architects
URL <https://www.patersonarchitects.com.au/our-work/boronia-pre-release-centre-for-women>

Figure 4: Boronia Pre-release Center for Women, Paterson Architects
URL <https://www.patersonarchitects.com.au/our-work/boronia-pre-release-centre-for-women>

Figure 5: Maggie’s Leeds Center, Heatherwick Studio, Photographer: Hulfton+Crow
URL https://www.archdaily.com/941540/maggies-leeds-centre-heatherwick-studio?ad_medium=gallery

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